FCC Radio Test Report

FCC ID	:	**N7NXR90**
Equipment	:	**WiFi / Bluetooth**
Brand Name	:	**Sierra Wireless**
Model Name	:	**XR90**
Applicant	:	**Sierra Wireless Inc. 13811 Wireless Way, Richmond, BC Canada V6V 3A4**
Manufacturer	:	**Sierra Wireless Inc. 13811 Wireless Way, Richmond, BC Canada V6V 3A4**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Nov. 09, 2020, and testing was started from Jan. 07, 2021 and completed on Jul. 22, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR0N0913-03AC	01	Initial issue of report	Jul. 29, 2021

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.1	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Ben Tseng
Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax(HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40, ax(HEW40)	2422-2452	3-9 [7]

Non-Beamforming
WiFi A & WiFi B

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	4TX
2.4-2.4835GHz	802.11g	20	4TX
2.4-2.4835GHz	802.11ax HEW20	20	4TX
2.4-2.4835GHz	802.11ax HEW40	40	4TX

Beamforming
WiFi A & WiFi B

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	20	4TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	4TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
5	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
6	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
7	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
8	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
9	PANORAMA	PWB-24-58	Paddle	FAKRA

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
5	1	-0.25	0.5	-
6	2	-0.25	0.5	-
7	3	-0.25	0.5	-
8	4	-0.25	0.5	-
9	1	-	-	3

Note 1: The EUT has five antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (4TX/4RX)

Ant. 5 (port 1), Ant. 6 (port 2), Ant. 7 (port 3) and Ant. 8 (port 4) could transmit/receive simultaneously.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Only Ant. 9 (port 1) can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (4TX/4RX)

Ant. 5 (port 1), Ant. 6 (port 2), Ant. 7 (port 3) and Ant. 8 (port 4) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point
Beamforming Function	☒	With beamforming	☐	Without beamforming

Type of EUT		
☒	Stand-alone	
☐	Combined (EUT where the radio part is fully integrated within another device)	
	Combined Equipment - Brand Name / Model No.:	…
☐	Plug-in radio (EUT intended for a variety of host systems)	
	Host System - Brand Name / Model No.:	…
☐	Other:	

1.1.4 Mode Test Duty Cycle

Non-Beamforming
WiFi A

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_4TX	0.972	0.12	1.825m	1k
802.11g_Nss1,(6Mbps)_4TX	0.914	0.39	565.312u	3k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40_Nss1,(MCS0)_4TX	0.98	0.09	n/a (DC>=0.98)	n/a (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

WiFi B

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_4TX	0.974	0.11	1.828m	1k
802.11g_Nss1,(6Mbps)_4TX	0.913	0.4	565.312u	3k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40_Nss1,(MCS0)_4TX	0.979	0.09	2.422m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming
WiFi A

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.787	1.04	2.955m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.753	1.23	2.955m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

WiFi B

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.834	0.79	2.955m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.753	1.23	2.955m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- KDB 558074 D01 v05r02
- KDB 662911 D01 v02r01
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab.：Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua **(TAF:** 3785**)**	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		**FAX:** 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
AC Conduction	CO04-HY	Tony Chang	25.1~26.7°C / 50~56%	21/Jul/2021~22/Jul/2021
RF Conducted	TH01-HY	Vivi Jiang	21.9~27.0°C / 53~61%	26/Jan/2021~08/Jun/2021
☒ Wen 33rd.St. **(TAF:** 3785**)**	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		**FAX:** 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
Radiated (below 1GHz)	03CH09-HY	Lego Lin	22.5~24.4°C / 42~54%	19/Jul/2021~21/Jul/2021
Radiated (above 1GHz)	03CH09-HY	Lego Lin	20.6~23.6°C / 54~61%	07/Jan/2021~16/Mar/2021 04/Jun/2021~11/Jun/2021

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	**Uncertainty**	**Remark**
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software	DOS v6.1

Non-Beamforming
WiFi A

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	219
2417MHz	235
2422MHz	235
2427MHz	240
2437MHz	240
2442MHz	235
2447MHz	235
2452MHz	230
2457MHz	230
2462MHz	210
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	200
2417MHz	225
2422MHz	235
2437MHz	235
2442MHz	235
2447MHz	225
2452MHz	215
2457MHz	195
2462MHz	195
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	210
2417MHz	230
2422MHz	235
2427MHz	240
2437MHz	240
2442MHz	230
2447MHz	220
2452MHz	215

Mode	Power Setting
2457MHz	210
2462MHz	192
802.11ax HEW40_Nss1,(MCS0)_4TX	-
2422MHz	180
2427MHz	190
2437MHz	185
2442MHz	175
2447MHz	165
2452MHz	163

WiFi B

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	215
2417MHz	235
2422MHz	230
2427MHz	240
2437MHz	240
2442MHz	240
2447MHz	235
2452MHz	220
2457MHz	210
2462MHz	190
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	215
2417MHz	240
2437MHz	240
2442MHz	240
2447MHz	235
2452MHz	230
2457MHz	205
2462MHz	195
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	205
2417MHz	230
2422MHz	235
2437MHz	235
2442MHz	225
2447MHz	220
2452MHz	210
2457MHz	200
2462MHz	190
802.11ax HEW40_Nss1,(MCS0)_4TX	-
2422MHz	180
2437MHz	180
2442MHz	170
2447MHz	160
2452MHz	155

Beamforming
WiFi A

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
2412MHz	208
2417MHz	240
2437MHz	230
2452MHz	240
2457MHz	228
2462MHz	193
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
2422MHz	212
2427MHz	227
2437MHz	222
2442MHz	205
2447MHz	182
2452MHz	175

WiFi B

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
2412MHz	209
2417MHz	240
2437MHz	240
2452MHz	240
2457MHz	228
2462MHz	175
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
2422MHz	215
2427MHz	211
2432MHz	240
2437MHz	222
2447MHz	240
2452MHz	185

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

Note: From Sporton Project No.: FR0N0913-02AC.

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Z Plane**
	

Note: From Sporton Project No.: FR0N0913-02AC. (above 1GHz)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WiFi A WLAN 2.4GHz+ WLAN 5GHz
2	WiFi B WLAN 2.4GHz+ WLAN 5GHz
Refer to Sporton Test Report No.: FA0N0913 for Co-location RF Exposure Evaluation and Appendix F for Radiated Emission Co-location.	

2.3 Accessories

Accessories				
RJ45 Cable	Category	5	In/Out door	-
	Signal Line	2.0 meter, non-shielded cable		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Adapter	Tenpao	S090IP2400375	-	Note 1
2	Notebook	HP	HSTNN-Q85C	-	-
3	AC Adapter (for NB)	HP	PPP012L-E	-	-
4	RS232-to-Lan cable	-	-	-	-
5	USB-to-RS232 cable	-	-	-	-
6	AC Adapter (for NB) (Remote)	HP	PPP012H-S	-	-
7	AC Power cable (Remote)	Power Sync	TPCMRN0018	-	-
8	Notebook (Remote)	HP	5220m	-	-

Note 1: Provided by Customer

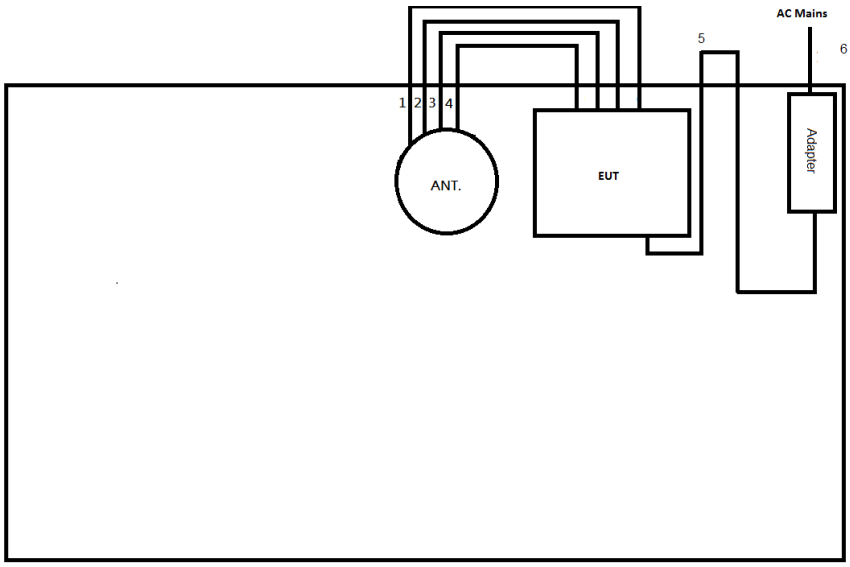
Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Notebook	Acer	Trave Mate P2410	-	-
4	Adapter for NB	HIPRO	HP-A0652R3B	-	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Adapter	Tenpao	S090IP2400375	-	Note 1
2	Notebook	HP	HSTNN-Q85C	-	-
3	AC Adapter (for NB)	HP	PPP012L-E	-	-
4	USB-to-RS232 cable	-	-	-	-
5	RS232-to-Lan cable	-	-	-	-
6	AC Adapter (for NB) (Remote)	HP	PPP012H-S	-	-
7	AC Power cable (Remote)	Power Sync	TPCMRN0018	-	-
8	Notebook (Remote)	HP	5220m	-	-

Note 1: Provided by Customer

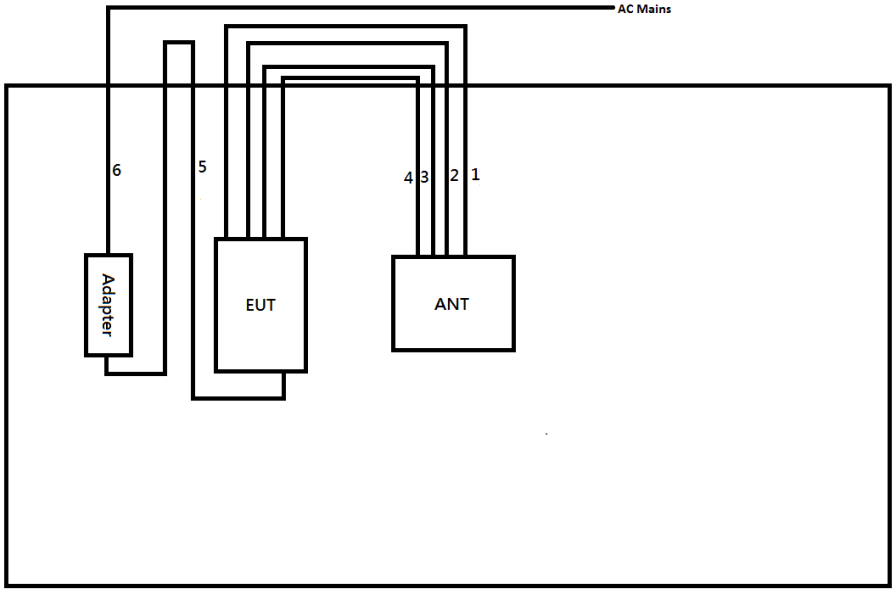
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	Ant cable	No	2.5	-
2	Ant cable	No	2.5	-
3	Ant cable	No	2.5	-
4	Ant cable	No	2.5	-
5	DC Power cable	No	3.0	-
6	AC Power cable	No	1.8	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	Ant cable	No	2.5	-
2	Ant cable	No	2.5	-
3	Ant cable	No	2.5	-
4	Ant cable	No	2.5	-
5	DC Power cable	No	3.0	-
6	AC Power cable	No	1.8	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

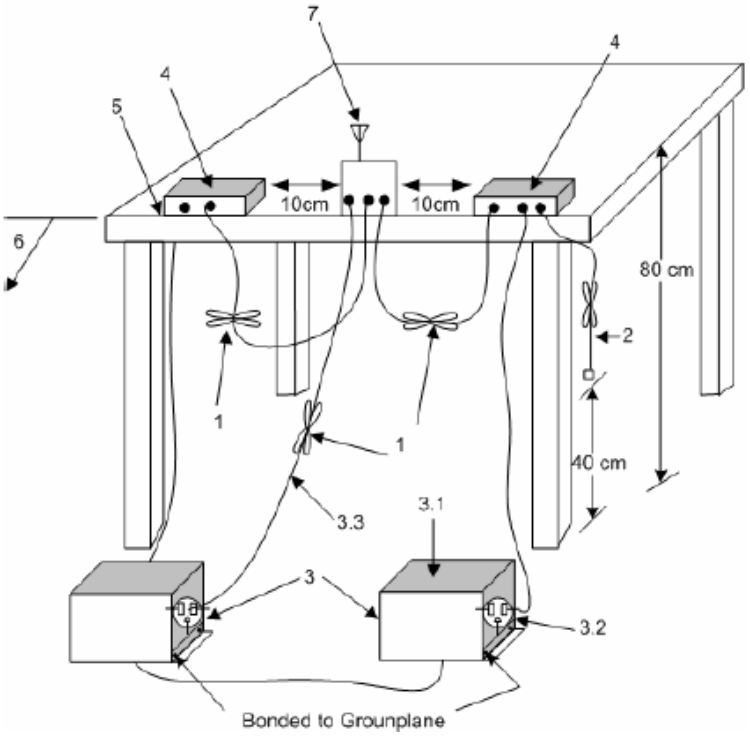
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

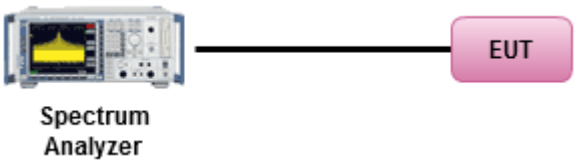
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
	☐ Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit		
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)	
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm	
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
	▪ Smart antenna system (SAS):	
		- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm
		- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm
		- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm
e.i.r.p. Power Limit:		
▪ 2400-2483.5 MHz Band		
	▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)	
	▪ Point-to-point systems (P2P): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm	
	▪ Smart antenna system (SAS)	
		- Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm
		- Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm
		- Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.		

3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
	☐ Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
	☐ Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
▪ Maximum Average Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
	☒ Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

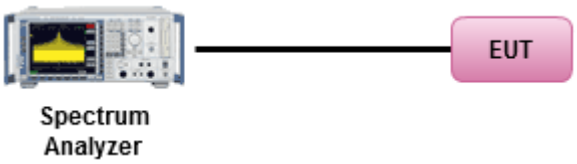
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒ Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪ For conducted measurement.
▪ If The EUT supports multiple transmit chains using options given below:
▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

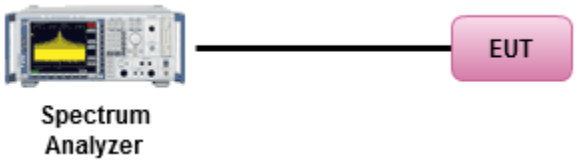
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

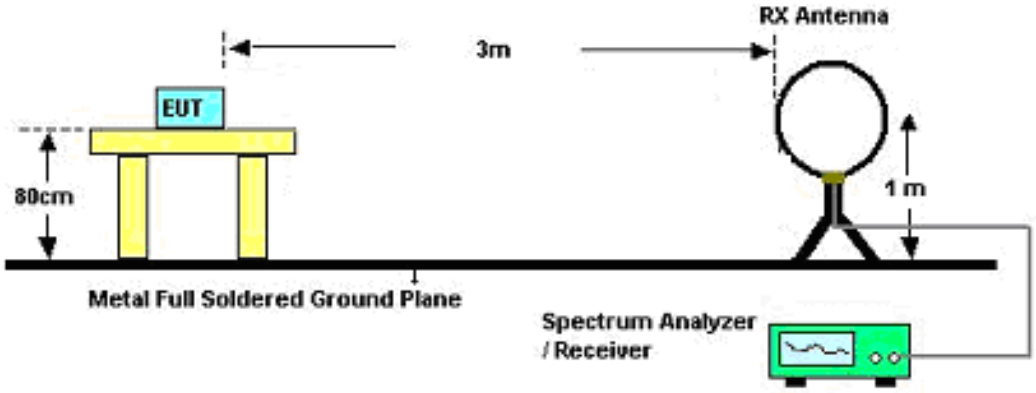
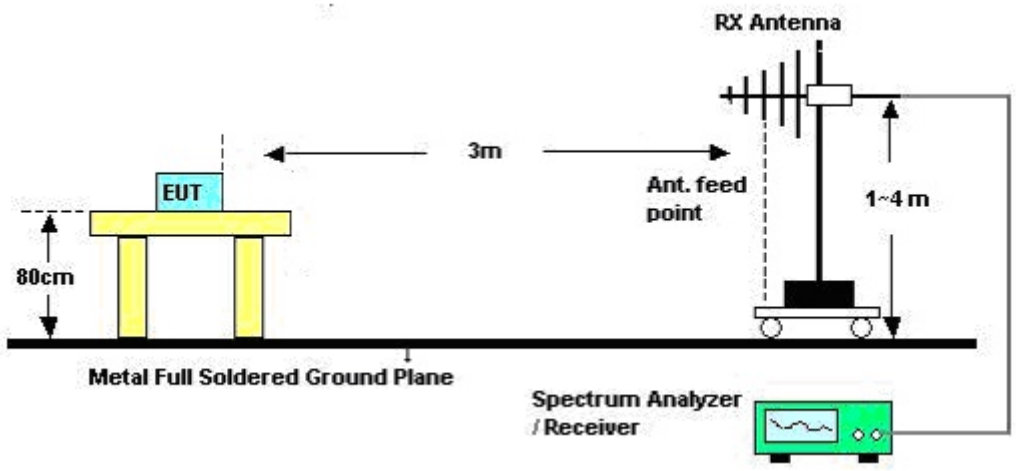
3.6.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
▪ Use the following spectrum analyzer settings:	
	▪ Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	▪ Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.
▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	▪ Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

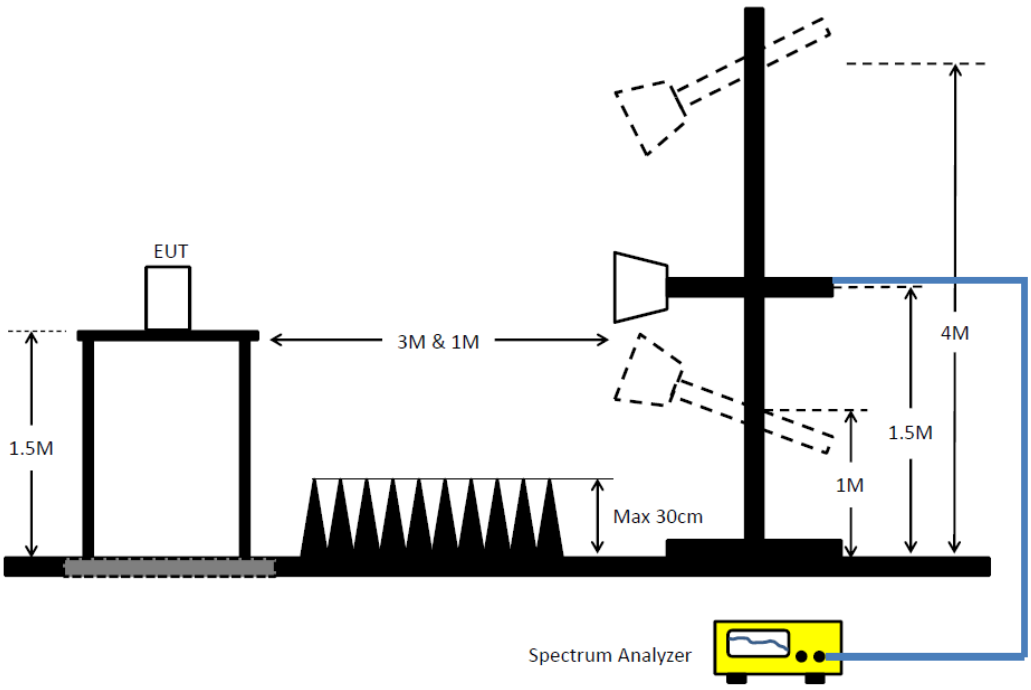
3.6.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.6.5 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	19/Apr/2021	18/Apr/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021
LISN (Support Unit)	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127477	9kHz ~ 30MHz	25/Feb/2021	24/Feb/2022

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	19/Oct/2020	18/Oct/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	18/Mar/2020	17/Mar/2021
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	18/Mar/2020	17/Mar/2021

Instrument for Radiated Test (below 1GHz)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	26/Mar/2021	25/Mar/2022
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2020	10/Aug/2021
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	12/Apr/2021	11/Apr/2022
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MTJ6102-05	35418 & 3	30MHz~1GHz	06/Sep/2020	05/Sep/2021
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz~30MHz	03/Sep/2020	02/Sep/2021
RF Cable-low	Jye Bao	RG142	CB031+324530/4	30MHz~1GHz	09/Feb/2021	08/Feb/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022
EMI Test Receiver	R&S	ESR3	102051	9kHz~3.6GHz	21/May/2021	20/May/2022

Instrument for Radiated Test (above 1GHz)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	19/Mar/2020	18/Mar/2021
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	18/Mar/2021	17/Mar/2022
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2020	10/Aug/2021
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	24/Jul/2020	23/Jul/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	28/May/2020	27/May/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	18/May/2021	17/May/2022
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	SN MY25918/4+ SN MY39478/4 + SN 324530/4	1GHz~40GHz	15/Aug/2020	14/Aug/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	13/Mar/2020	12/Mar/2021
EMI Test Receiver	R&S	ESR3	102051	9kHz~3.6GHz	29/May/2020	28/May/2021

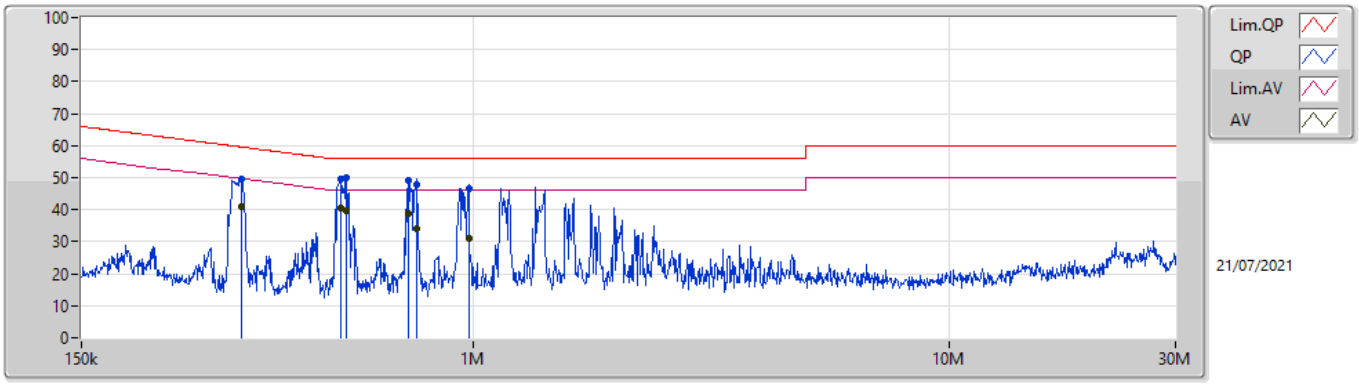
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	525.384k	40.44	46.00	-5.56	Line

Result

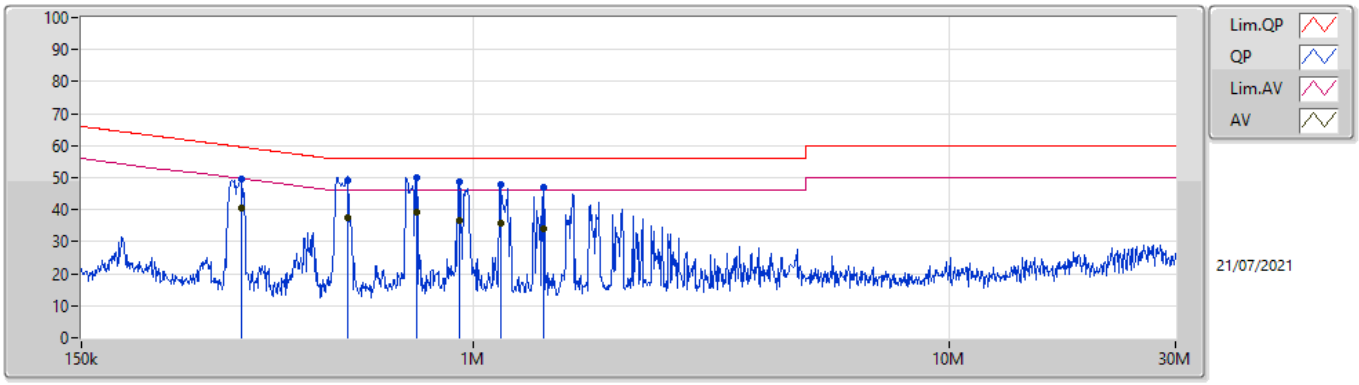
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	325.41k	49.55	59.58	-10.03	Line	-
Mode 1	Pass	AV	325.41k	40.89	49.58	-8.69	Line	-
Mode 1	Pass	QP	525.384k	49.46	56.00	-6.54	Line	-
Mode 1	Pass	AV	525.384k	40.44	46.00	-5.56	Line	-
Mode 1	Pass	QP	542.434k	50.06	56.00	-5.94	Line	-
Mode 1	Pass	AV	542.434k	39.46	46.00	-6.54	Line	-
Mode 1	Pass	QP	731.771k	49.27	56.00	-6.73	Line	-
Mode 1	Pass	AV	731.771k	38.74	46.00	-7.26	Line	-
Mode 1	Pass	QP	761.574k	48.03	56.00	-7.97	Line	-
Mode 1	Pass	AV	761.574k	33.98	46.00	-12.02	Line	-
Mode 1	Pass	QP	979.346k	46.74	56.00	-9.26	Line	-
Mode 1	Pass	AV	979.346k	31.00	46.00	-15.00	Line	-
Mode 1	Pass	QP	325.41k	49.51	59.58	-10.07	Neutral	-
Mode 1	Pass	AV	325.41k	40.70	49.58	-8.88	Neutral	-
Mode 1	Pass	QP	544.604k	49.14	56.00	-6.86	Neutral	-
Mode 1	Pass	AV	544.604k	37.55	46.00	-8.45	Neutral	-
Mode 1	Pass	QP	758.54k	49.95	56.00	-6.05	Neutral	-
Mode 1	Pass	AV	758.54k	39.28	46.00	-6.72	Neutral	-
Mode 1	Pass	QP	933.537k	48.59	56.00	-7.41	Neutral	-
Mode 1	Pass	AV	933.537k	36.69	46.00	-9.31	Neutral	-
Mode 1	Pass	QP	1.144M	47.95	56.00	-8.05	Neutral	-
Mode 1	Pass	AV	1.144M	35.79	46.00	-10.21	Neutral	-
Mode 1	Pass	QP	1.408M	47.04	56.00	-8.96	Neutral	-
Mode 1	Pass	AV	1.408M	33.84	46.00	-12.16	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	325.41k	49.55	59.58	-10.03	19.62	Line	-	29.93	9.67	0.05	9.90
AV	325.41k	40.89	49.58	-8.69	19.62	Line	-	21.27	9.67	0.05	9.90
QP	525.384k	49.46	56.00	-6.54	19.61	Line	-	29.85	9.67	0.07	9.87
AV	525.384k	40.44	46.00	-5.56	19.61	Line	-	20.83	9.67	0.07	9.87
QP	542.434k	50.06	56.00	-5.94	19.61	Line	-	30.45	9.67	0.07	9.87
AV	542.434k	39.46	46.00	-6.54	19.61	Line	-	19.85	9.67	0.07	9.87
QP	731.771k	49.27	56.00	-6.73	19.57	Line	-	29.70	9.67	0.07	9.83
AV	731.771k	38.74	46.00	-7.26	19.57	Line	-	19.17	9.67	0.07	9.83
QP	761.574k	48.03	56.00	-7.97	19.57	Line	-	28.46	9.67	0.07	9.83
AV	761.574k	33.98	46.00	-12.02	19.57	Line	-	14.41	9.67	0.07	9.83
QP	979.346k	46.74	56.00	-9.26	19.55	Line	-	27.19	9.67	0.08	9.80
AV	979.346k	31.00	46.00	-15.00	19.55	Line	-	11.45	9.67	0.08	9.80

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	325.41k	49.51	59.58	-10.07	19.62	Neutral	-	29.89	9.67	0.05	9.90
AV	325.41k	40.70	49.58	-8.88	19.62	Neutral	-	21.08	9.67	0.05	9.90
QP	544.604k	49.14	56.00	-6.86	19.61	Neutral	-	29.53	9.67	0.07	9.87
AV	544.604k	37.55	46.00	-8.45	19.61	Neutral	-	17.94	9.67	0.07	9.87
QP	758.54k	49.95	56.00	-6.05	19.57	Neutral	-	30.38	9.67	0.07	9.83
AV	758.54k	39.28	46.00	-6.72	19.57	Neutral	-	19.71	9.67	0.07	9.83
QP	933.537k	48.59	56.00	-7.41	19.56	Neutral	-	29.03	9.67	0.08	9.81
AV	933.537k	36.69	46.00	-9.31	19.56	Neutral	-	17.13	9.67	0.08	9.81
QP	1.144M	47.95	56.00	-8.05	19.55	Neutral	-	28.40	9.67	0.08	9.80
AV	1.144M	35.79	46.00	-10.21	19.55	Neutral	-	16.24	9.67	0.08	9.80
QP	1.408M	47.04	56.00	-8.96	19.56	Neutral	-	27.48	9.67	0.09	9.80
AV	1.408M	33.84	46.00	-12.16	19.56	Neutral	-	14.28	9.67	0.09	9.80

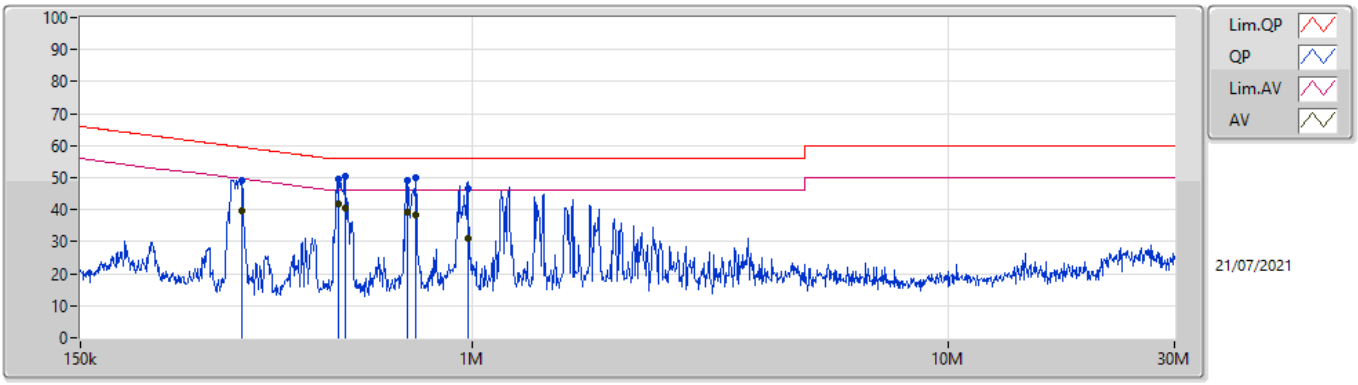
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	523.291k	41.76	46.00	-4.24	Line

Result

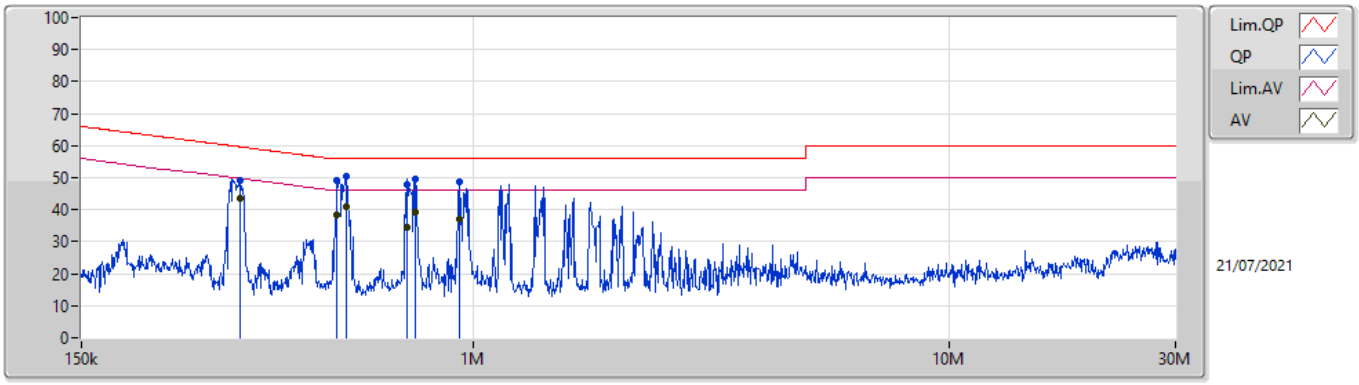
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	326.712k	49.10	59.54	-10.44	Line	-
Mode 1	Pass	AV	326.712k	39.83	49.54	-9.71	Line	-
Mode 1	Pass	QP	523.291k	49.73	56.00	-6.27	Line	-
Mode 1	Pass	AV	523.291k	41.76	46.00	-4.24	Line	-
Mode 1	Pass	QP	542.434k	50.29	56.00	-5.71	Line	-
Mode 1	Pass	AV	542.434k	40.32	46.00	-5.68	Line	-
Mode 1	Pass	QP	728.856k	49.34	56.00	-6.66	Line	-
Mode 1	Pass	AV	728.856k	39.19	46.00	-6.81	Line	-
Mode 1	Pass	QP	758.54k	49.97	56.00	-6.03	Line	-
Mode 1	Pass	AV	758.54k	38.47	46.00	-7.53	Line	-
Mode 1	Pass	QP	979.346k	46.35	56.00	-9.65	Line	-
Mode 1	Pass	AV	979.346k	31.13	46.00	-14.87	Line	-
Mode 1	Pass	QP	322.823k	49.33	59.63	-10.30	Neutral	-
Mode 1	Pass	AV	322.823k	43.64	49.63	-5.99	Neutral	-
Mode 1	Pass	QP	517.062k	49.18	56.00	-6.82	Neutral	-
Mode 1	Pass	AV	517.062k	38.33	46.00	-7.67	Neutral	-
Mode 1	Pass	QP	542.434k	50.37	56.00	-5.63	Neutral	-
Mode 1	Pass	AV	542.434k	40.99	46.00	-5.01	Neutral	-
Mode 1	Pass	QP	725.952k	47.86	56.00	-8.14	Neutral	-
Mode 1	Pass	AV	725.952k	34.44	46.00	-11.56	Neutral	-
Mode 1	Pass	QP	755.518k	49.74	56.00	-6.26	Neutral	-
Mode 1	Pass	AV	755.518k	39.23	46.00	-6.77	Neutral	-
Mode 1	Pass	QP	937.272k	48.86	56.00	-7.14	Neutral	-
Mode 1	Pass	AV	937.272k	36.97	46.00	-9.03	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	326.712k	49.10	59.54	-10.44	19.62	Line	-	29.48	9.67	0.05	9.90
AV	326.712k	39.83	49.54	-9.71	19.62	Line	-	20.21	9.67	0.05	9.90
QP	523.291k	49.73	56.00	-6.27	19.61	Line	-	30.12	9.67	0.07	9.87
AV	523.291k	41.76	46.00	-4.24	19.61	Line	-	22.15	9.67	0.07	9.87
QP	542.434k	50.29	56.00	-5.71	19.61	Line	-	30.68	9.67	0.07	9.87
AV	542.434k	40.32	46.00	-5.68	19.61	Line	-	20.71	9.67	0.07	9.87
QP	728.856k	49.34	56.00	-6.66	19.57	Line	-	29.77	9.67	0.07	9.83
AV	728.856k	39.19	46.00	-6.81	19.57	Line	-	19.62	9.67	0.07	9.83
QP	758.54k	49.97	56.00	-6.03	19.57	Line	-	30.40	9.67	0.07	9.83
AV	758.54k	38.47	46.00	-7.53	19.57	Line	-	18.90	9.67	0.07	9.83
QP	979.346k	46.35	56.00	-9.65	19.55	Line	-	26.80	9.67	0.08	9.80
AV	979.346k	31.13	46.00	-14.87	19.55	Line	-	11.58	9.67	0.08	9.80

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	322.823k	49.33	59.63	-10.30	19.62	Neutral	-	29.71	9.67	0.05	9.90
AV	322.823k	43.64	49.63	-5.99	19.62	Neutral	-	24.02	9.67	0.05	9.90
QP	517.062k	49.18	56.00	-6.82	19.61	Neutral	-	29.57	9.67	0.07	9.87
AV	517.062k	38.33	46.00	-7.67	19.61	Neutral	-	18.72	9.67	0.07	9.87
QP	542.434k	50.37	56.00	-5.63	19.61	Neutral	-	30.76	9.67	0.07	9.87
AV	542.434k	40.99	46.00	-5.01	19.61	Neutral	-	21.38	9.67	0.07	9.87
QP	725.952k	47.86	56.00	-8.14	19.57	Neutral	-	28.29	9.67	0.07	9.83
AV	725.952k	34.44	46.00	-11.56	19.57	Neutral	-	14.87	9.67	0.07	9.83
QP	755.518k	49.74	56.00	-6.26	19.57	Neutral	-	30.17	9.67	0.07	9.83
AV	755.518k	39.23	46.00	-6.77	19.57	Neutral	-	19.66	9.67	0.07	9.83
QP	937.272k	48.86	56.00	-7.14	19.56	Neutral	-	29.30	9.67	0.08	9.81
AV	937.272k	36.97	46.00	-9.03	19.56	Neutral	-	17.41	9.67	0.08	9.81

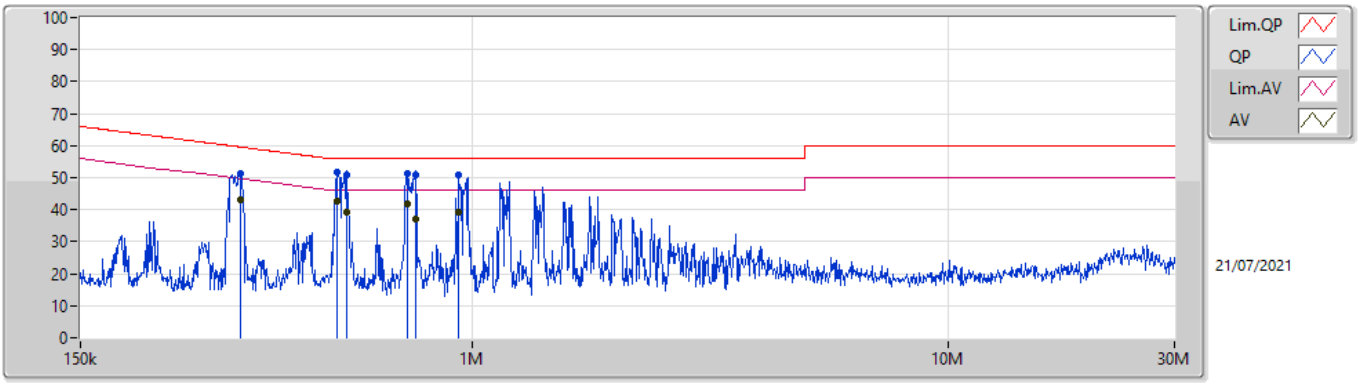
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	517.062k	42.83	46.00	-3.17	Neutral

Result

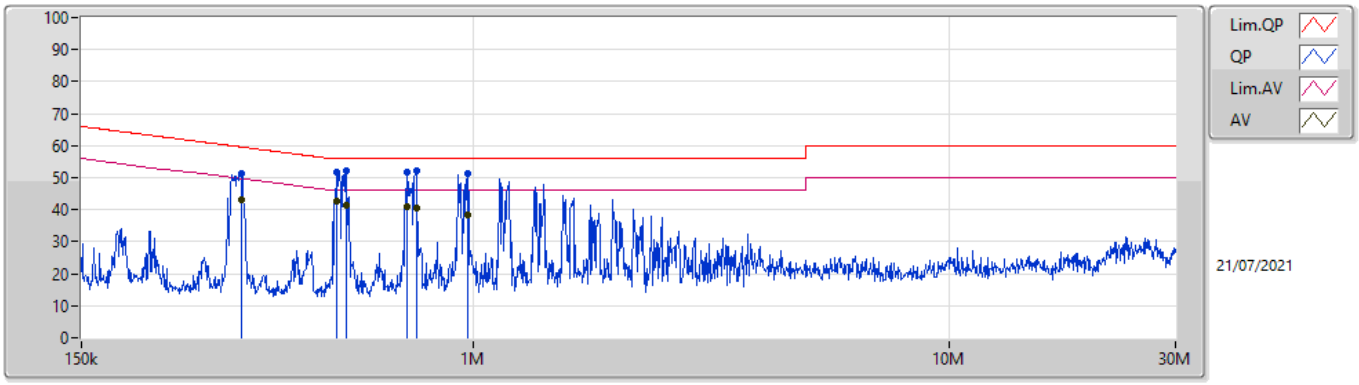
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	325.41k	51.45	59.58	-8.13	Line	-
Mode 1	Pass	AV	325.41k	43.00	49.58	-6.58	Line	-
Mode 1	Pass	QP	519.13k	51.88	56.00	-4.12	Line	-
Mode 1	Pass	AV	519.13k	42.80	46.00	-3.20	Line	-
Mode 1	Pass	QP	544.604k	51.01	56.00	-4.99	Line	-
Mode 1	Pass	AV	544.604k	39.37	46.00	-6.63	Line	-
Mode 1	Pass	QP	728.856k	51.43	56.00	-4.57	Line	-
Mode 1	Pass	AV	728.856k	41.77	46.00	-4.23	Line	-
Mode 1	Pass	QP	761.574k	50.88	56.00	-5.12	Line	-
Mode 1	Pass	AV	761.574k	37.04	46.00	-8.96	Line	-
Mode 1	Pass	QP	933.537k	50.97	56.00	-5.03	Line	-
Mode 1	Pass	AV	933.537k	39.34	46.00	-6.66	Line	-
Mode 1	Pass	QP	325.41k	51.43	59.58	-8.15	Neutral	-
Mode 1	Pass	AV	325.41k	42.89	49.58	-6.69	Neutral	-
Mode 1	Pass	QP	517.062k	51.79	56.00	-4.21	Neutral	-
Mode 1	Pass	AV	517.062k	42.83	46.00	-3.17	Neutral	-
Mode 1	Pass	QP	542.434k	52.18	56.00	-3.82	Neutral	-
Mode 1	Pass	AV	542.434k	41.38	46.00	-4.62	Neutral	-
Mode 1	Pass	QP	725.952k	51.58	56.00	-4.42	Neutral	-
Mode 1	Pass	AV	725.952k	41.15	46.00	-4.85	Neutral	-
Mode 1	Pass	QP	758.54k	51.98	56.00	-4.02	Neutral	-
Mode 1	Pass	AV	758.54k	40.31	46.00	-5.69	Neutral	-
Mode 1	Pass	QP	975.445k	51.17	56.00	-4.83	Neutral	-
Mode 1	Pass	AV	975.445k	38.30	46.00	-7.70	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	325.41k	51.45	59.58	-8.13	19.62	Line	-	31.83	9.67	0.05	9.90
AV	325.41k	43.00	49.58	-6.58	19.62	Line	-	23.38	9.67	0.05	9.90
QP	519.13k	51.88	56.00	-4.12	19.61	Line	-	32.27	9.67	0.07	9.87
AV	519.13k	42.80	46.00	-3.20	19.61	Line	-	23.19	9.67	0.07	9.87
QP	544.604k	51.01	56.00	-4.99	19.61	Line	-	31.40	9.67	0.07	9.87
AV	544.604k	39.37	46.00	-6.63	19.61	Line	-	19.76	9.67	0.07	9.87
QP	728.856k	51.43	56.00	-4.57	19.57	Line	-	31.86	9.67	0.07	9.83
AV	728.856k	41.77	46.00	-4.23	19.57	Line	-	22.20	9.67	0.07	9.83
QP	761.574k	50.88	56.00	-5.12	19.57	Line	-	31.31	9.67	0.07	9.83
AV	761.574k	37.04	46.00	-8.96	19.57	Line	-	17.47	9.67	0.07	9.83
QP	933.537k	50.97	56.00	-5.03	19.56	Line	-	31.41	9.67	0.08	9.81
AV	933.537k	39.34	46.00	-6.66	19.56	Line	-	19.78	9.67	0.08	9.81

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	325.41k	51.43	59.58	-8.15	19.62	Neutral	-	31.81	9.67	0.05	9.90
AV	325.41k	42.89	49.58	-6.69	19.62	Neutral	-	23.27	9.67	0.05	9.90
QP	517.062k	51.79	56.00	-4.21	19.61	Neutral	-	32.18	9.67	0.07	9.87
AV	517.062k	42.83	46.00	-3.17	19.61	Neutral	-	23.22	9.67	0.07	9.87
QP	542.434k	52.18	56.00	-3.82	19.61	Neutral	-	32.57	9.67	0.07	9.87
AV	542.434k	41.38	46.00	-4.62	19.61	Neutral	-	21.77	9.67	0.07	9.87
QP	725.952k	51.58	56.00	-4.42	19.57	Neutral	-	32.01	9.67	0.07	9.83
AV	725.952k	41.15	46.00	-4.85	19.57	Neutral	-	21.58	9.67	0.07	9.83
QP	758.54k	51.98	56.00	-4.02	19.57	Neutral	-	32.41	9.67	0.07	9.83
AV	758.54k	40.31	46.00	-5.69	19.57	Neutral	-	20.74	9.67	0.07	9.83
QP	975.445k	51.17	56.00	-4.83	19.55	Neutral	-	31.62	9.67	0.08	9.80
AV	975.445k	38.30	46.00	-7.70	19.55	Neutral	-	18.75	9.67	0.08	9.80

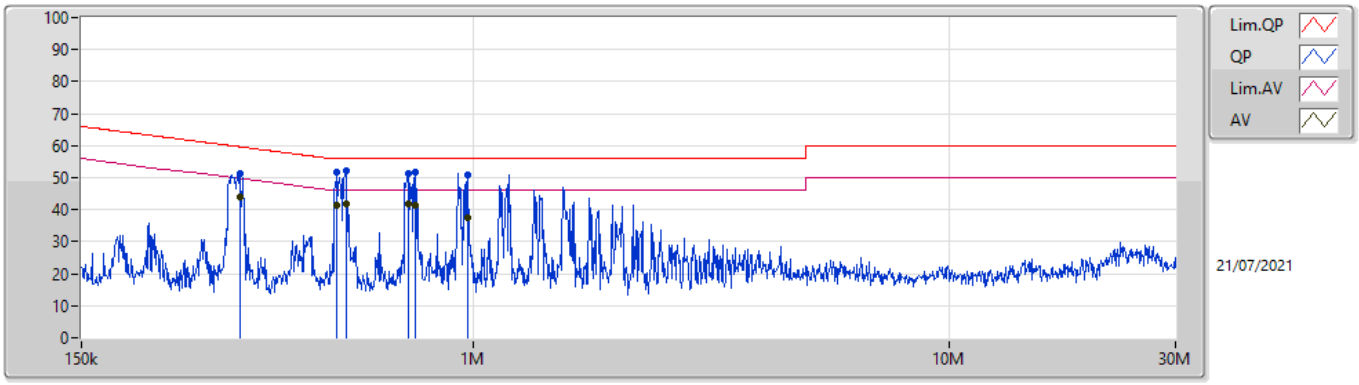
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	523.291k	42.44	46.00	-3.56	Neutral

Result

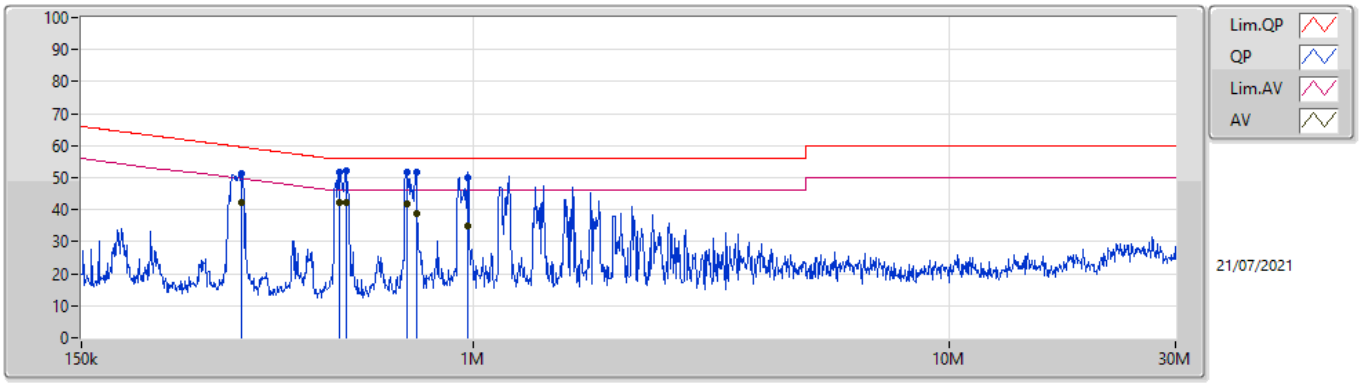
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	324.114k	51.47	59.59	-8.12	Line	-
Mode 1	Pass	AV	324.114k	43.82	49.59	-5.77	Line	-
Mode 1	Pass	QP	517.062k	51.71	56.00	-4.29	Line	-
Mode 1	Pass	AV	517.062k	41.55	46.00	-4.45	Line	-
Mode 1	Pass	QP	542.434k	52.24	56.00	-3.76	Line	-
Mode 1	Pass	AV	542.434k	41.78	46.00	-4.22	Line	-
Mode 1	Pass	QP	728.856k	51.47	56.00	-4.53	Line	-
Mode 1	Pass	AV	728.856k	41.77	46.00	-4.23	Line	-
Mode 1	Pass	QP	755.518k	51.88	56.00	-4.12	Line	-
Mode 1	Pass	AV	755.518k	41.36	46.00	-4.64	Line	-
Mode 1	Pass	QP	975.445k	51.01	56.00	-4.99	Line	-
Mode 1	Pass	AV	975.445k	37.40	46.00	-8.60	Line	-
Mode 1	Pass	QP	325.41k	51.35	59.58	-8.23	Neutral	-
Mode 1	Pass	AV	325.41k	42.09	49.58	-7.49	Neutral	-
Mode 1	Pass	QP	523.291k	51.63	56.00	-4.37	Neutral	-
Mode 1	Pass	AV	523.291k	42.44	46.00	-3.56	Neutral	-
Mode 1	Pass	QP	540.273k	52.35	56.00	-3.65	Neutral	-
Mode 1	Pass	AV	540.273k	42.32	46.00	-3.68	Neutral	-
Mode 1	Pass	QP	725.952k	51.53	56.00	-4.47	Neutral	-
Mode 1	Pass	AV	725.952k	41.84	46.00	-4.16	Neutral	-
Mode 1	Pass	QP	758.54k	51.71	56.00	-4.29	Neutral	-
Mode 1	Pass	AV	758.54k	38.91	46.00	-7.09	Neutral	-
Mode 1	Pass	QP	975.445k	50.15	56.00	-5.85	Neutral	-
Mode 1	Pass	AV	975.445k	34.95	46.00	-11.05	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	324.114k	51.47	59.59	-8.12	19.62	Line	-	31.85	9.67	0.05	9.90
AV	324.114k	43.82	49.59	-5.77	19.62	Line	-	24.20	9.67	0.05	9.90
QP	517.062k	51.71	56.00	-4.29	19.61	Line	-	32.10	9.67	0.07	9.87
AV	517.062k	41.55	46.00	-4.45	19.61	Line	-	21.94	9.67	0.07	9.87
QP	542.434k	52.24	56.00	-3.76	19.61	Line	-	32.63	9.67	0.07	9.87
AV	542.434k	41.78	46.00	-4.22	19.61	Line	-	22.17	9.67	0.07	9.87
QP	728.856k	51.47	56.00	-4.53	19.57	Line	-	31.90	9.67	0.07	9.83
AV	728.856k	41.77	46.00	-4.23	19.57	Line	-	22.20	9.67	0.07	9.83
QP	755.518k	51.88	56.00	-4.12	19.57	Line	-	32.31	9.67	0.07	9.83
AV	755.518k	41.36	46.00	-4.64	19.57	Line	-	21.79	9.67	0.07	9.83
QP	975.445k	51.01	56.00	-4.99	19.55	Line	-	31.46	9.67	0.08	9.80
AV	975.445k	37.40	46.00	-8.60	19.55	Line	-	17.85	9.67	0.08	9.80

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	325.41k	51.35	59.58	-8.23	19.62	Neutral	-	31.73	9.67	0.05	9.90
AV	325.41k	42.09	49.58	-7.49	19.62	Neutral	-	22.47	9.67	0.05	9.90
QP	523.291k	51.63	56.00	-4.37	19.61	Neutral	-	32.02	9.67	0.07	9.87
AV	523.291k	42.44	46.00	-3.56	19.61	Neutral	-	22.83	9.67	0.07	9.87
QP	540.273k	52.35	56.00	-3.65	19.61	Neutral	-	32.74	9.67	0.07	9.87
AV	540.273k	42.32	46.00	-3.68	19.61	Neutral	-	22.71	9.67	0.07	9.87
QP	725.952k	51.53	56.00	-4.47	19.57	Neutral	-	31.96	9.67	0.07	9.83
AV	725.952k	41.84	46.00	-4.16	19.57	Neutral	-	22.27	9.67	0.07	9.83
QP	758.54k	51.71	56.00	-4.29	19.57	Neutral	-	32.14	9.67	0.07	9.83
AV	758.54k	38.91	46.00	-7.09	19.57	Neutral	-	19.34	9.67	0.07	9.83
QP	975.445k	50.15	56.00	-5.85	19.55	Neutral	-	30.60	9.67	0.08	9.80
AV	975.445k	34.95	46.00	-11.05	19.55	Neutral	-	15.40	9.67	0.08	9.80

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	10.15M	15.825M	15M8G1D	10.1M	10.7M
802.11g_Nss1,(6Mbps)_4TX	16.35M	19.325M	19M3D1D	16.025M	16.75M
802.11ax HEW20_Nss1,(MCS0)_4TX	17.75M	24.35M	24M3D1D	17.525M	17.825M
802.11ax HEW40_Nss1,(MCS0)_4TX	36.35M	36.8M	36M8D1D	35.05M	36.4M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

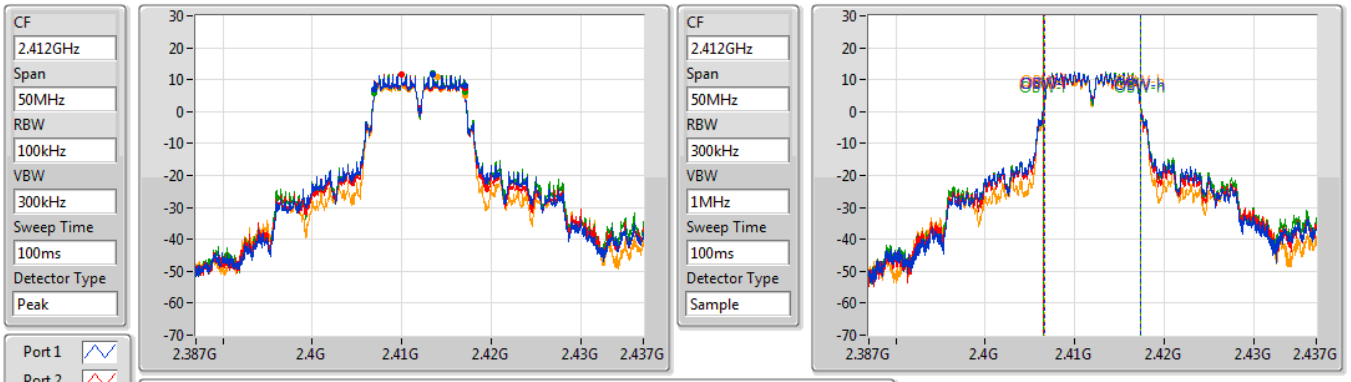
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	10.125M	10.85M	10.125M	10.825M	10.15M	10.875M	10.15M	10.7M
2437MHz	Pass	500k	10.1M	15M	10.1M	14.725M	10.125M	15.825M	10.125M	12.875M
2462MHz	Pass	500k	10.15M	10.825M	10.125M	10.825M	10.125M	10.875M	10.1M	10.7M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.85M	16.35M	16.825M	16.35M	16.925M	16.35M	16.8M
2437MHz	Pass	500k	16.325M	19.3M	16.275M	18.5M	16.3M	19.325M	16.25M	17.825M
2462MHz	Pass	500k	16.3M	16.8M	16.025M	16.775M	16.3M	16.875M	16.325M	16.75M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.9M	17.75M	17.9M	17.6M	18M	17.575M	17.975M
2437MHz	Pass	500k	17.6M	23.225M	17.75M	22.425M	17.575M	24.35M	17.525M	20.75M
2462MHz	Pass	500k	17.575M	17.875M	17.675M	17.925M	17.675M	17.875M	17.55M	17.825M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.9M	36.6M	36M	36.6M	36.3M	36.55M	35.4M	36.45M
2437MHz	Pass	500k	35.55M	36.45M	36.3M	36.4M	35.55M	36.55M	35.05M	36.45M
2452MHz	Pass	500k	36.35M	36.7M	36.3M	36.8M	36.3M	36.7M	36.3M	36.75M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_4TX EBW

2412MHz

05/02/2021

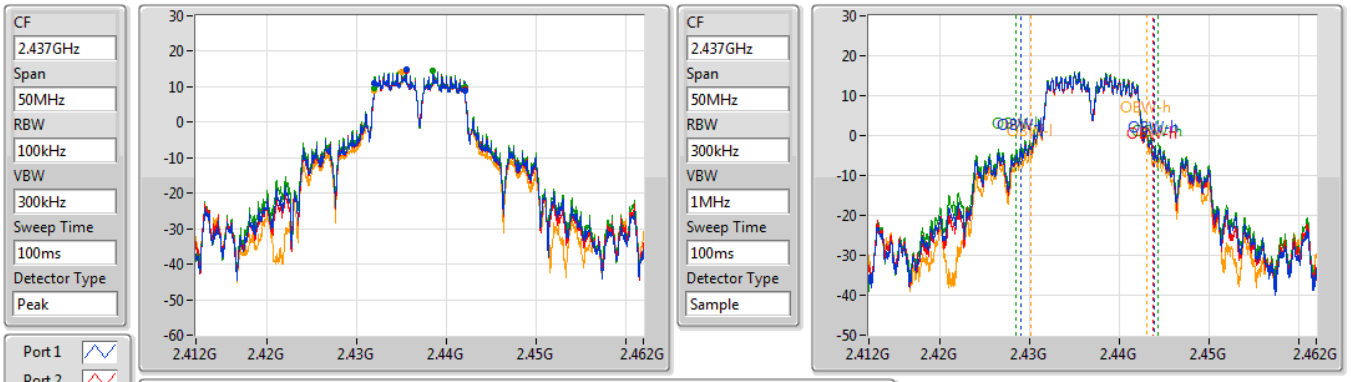


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.125M	2.406925G	2.41705G	10.85M	2.406575G	2.417425G	500k	1
10.125M	2.406925G	2.41705G	10.825M	2.40655G	2.417375G	500k	2
10.15M	2.406925G	2.417075G	10.875M	2.40655G	2.417425G	500k	3
10.15M	2.406925G	2.417075G	10.7M	2.40665G	2.41735G	500k	4

802.11b_Nss1,(1Mbps)_4TX EBW

2437MHz

05/02/2021

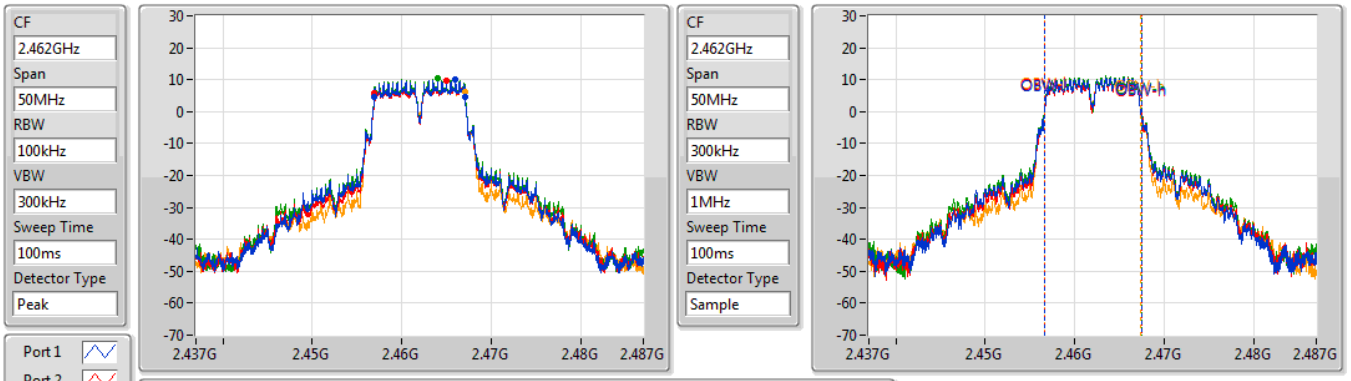


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.1M	2.43195G	2.44205G	15M	2.42895G	2.44395G	500k	1
10.1M	2.43195G	2.44205G	14.725M	2.42905G	2.443775G	500k	2
10.125M	2.431925G	2.44205G	15.825M	2.428425G	2.44425G	500k	3
10.125M	2.431925G	2.44205G	12.875M	2.430175G	2.44305G	500k	4

802.11b_Nss1,(1Mbps)_4TX EBW

2462MHz

05/02/2021

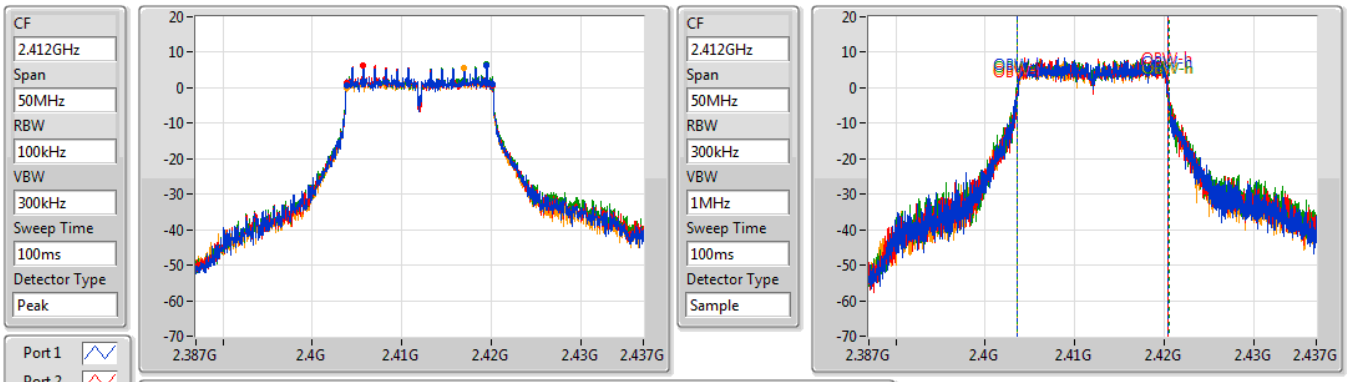


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.15M	2.456925G	2.467075G	10.825M	2.45665G	2.467475G	500k	1
10.125M	2.45695G	2.467075G	10.825M	2.456675G	2.4675G	500k	2
10.125M	2.45695G	2.467075G	10.875M	2.456625G	2.4675G	500k	3
10.1M	2.45695G	2.46705G	10.7M	2.456675G	2.467375G	500k	4

802.11g_Nss1,(6Mbps)_4TX EBW

2412MHz

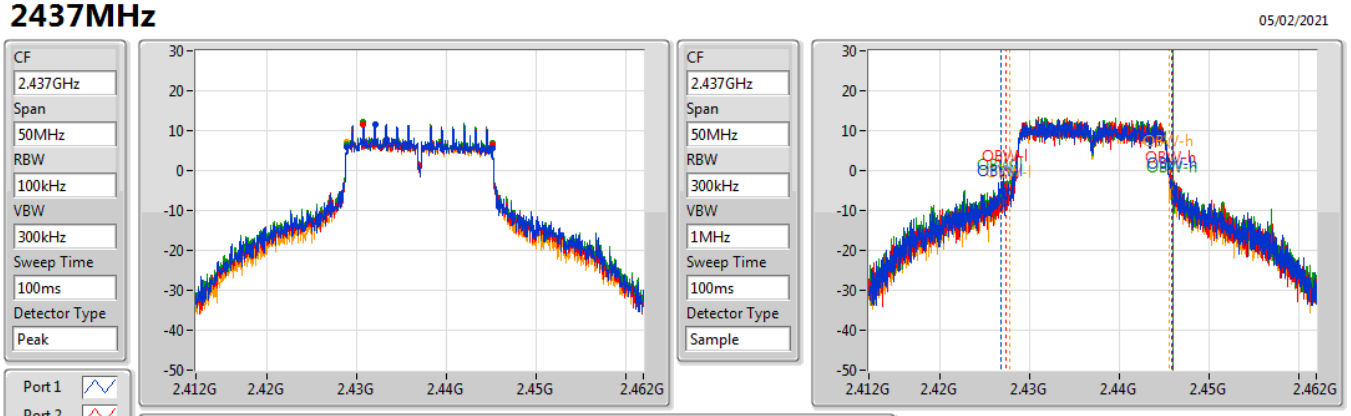
05/02/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.403825G	2.420175G	16.85M	2.4036G	2.42045G	500k	1
16.35M	2.403825G	2.420175G	16.825M	2.4036G	2.420425G	500k	2
16.35M	2.403825G	2.420175G	16.925M	2.4036G	2.420525G	500k	3
16.35M	2.403825G	2.420175G	16.8M	2.4036G	2.4204G	500k	4

802.11g_Nss1,(6Mbps)_4TX EBW

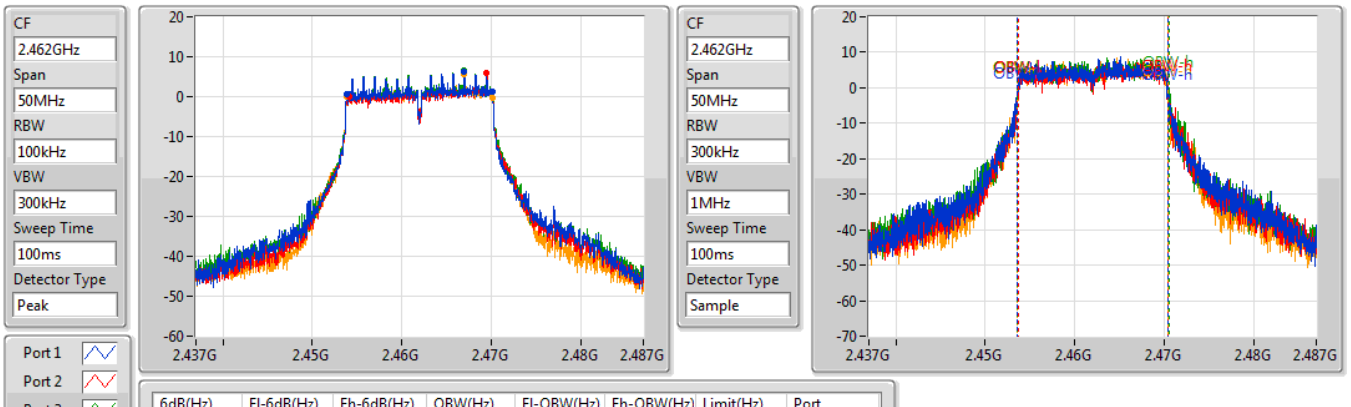
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.428825G	2.44515G	19.3M	2.426725G	2.446025G	500k	1
16.275M	2.42885G	2.445125G	18.5M	2.427325G	2.445825G	500k	2
16.3M	2.428825G	2.445125G	19.325M	2.426725G	2.44605G	500k	3
16.25M	2.42885G	2.4451G	17.825M	2.42775G	2.445575G	500k	4

802.11g_Nss1,(6Mbps)_4TX EBW

2462MHz

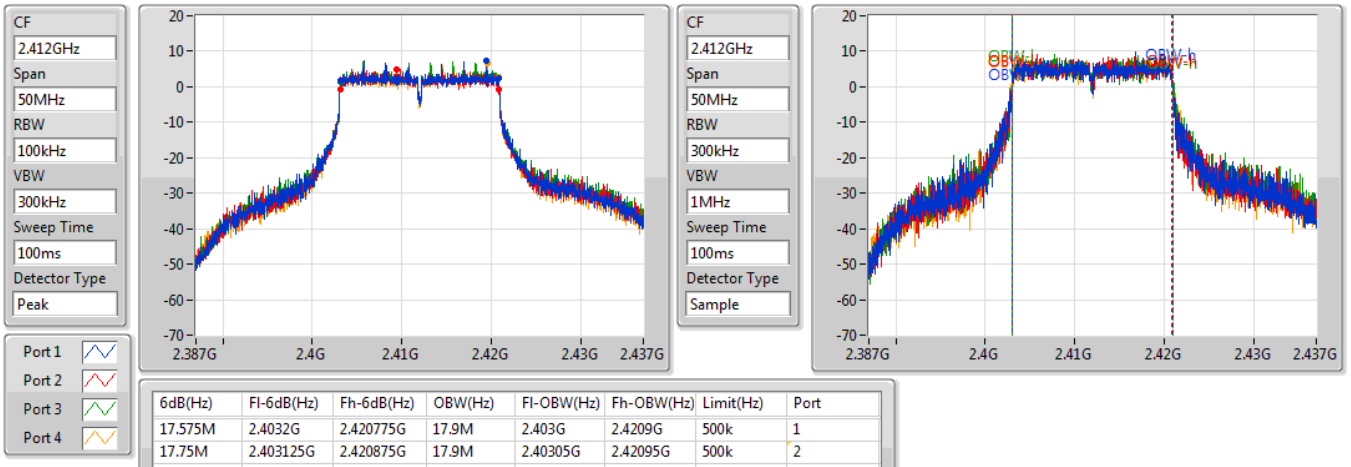


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.8M	2.4536G	2.4704G	500k	1
16.025M	2.454125G	2.47015G	16.775M	2.45365G	2.470425G	500k	2
16.3M	2.45385G	2.47015G	16.875M	2.453625G	2.4705G	500k	3
16.325M	2.45385G	2.470175G	16.75M	2.453625G	2.470375G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2412MHz

05/02/2021

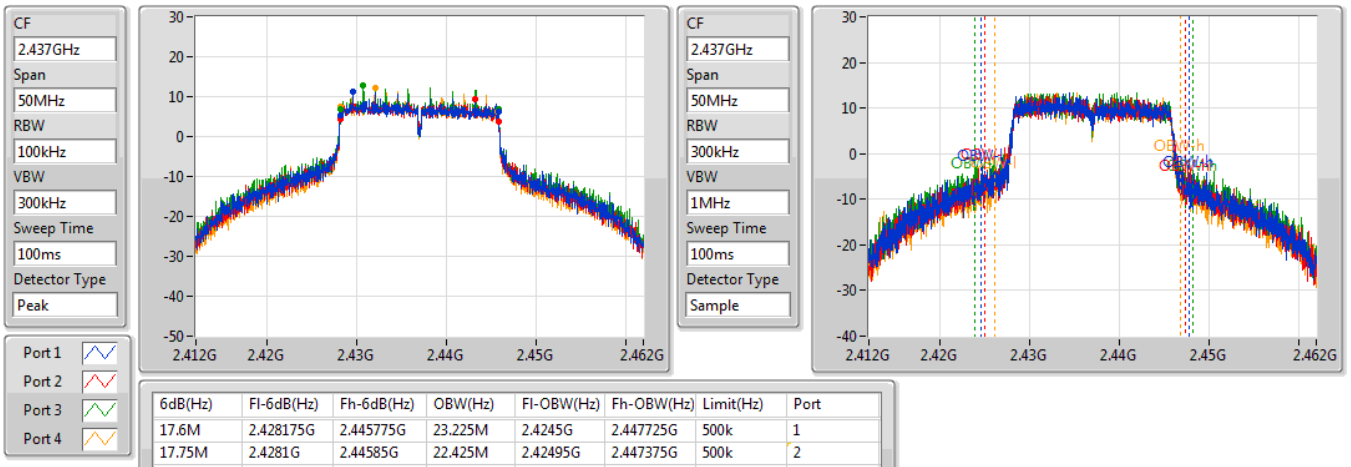


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.4032G	2.420775G	17.9M	2.403G	2.4209G	500k	1
17.75M	2.403125G	2.420875G	17.9M	2.40305G	2.42095G	500k	2
17.6M	2.4032G	2.4208G	18M	2.403025G	2.421025G	500k	3
17.575M	2.4032G	2.420775G	17.975M	2.403025G	2.421G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2437MHz

05/02/2021

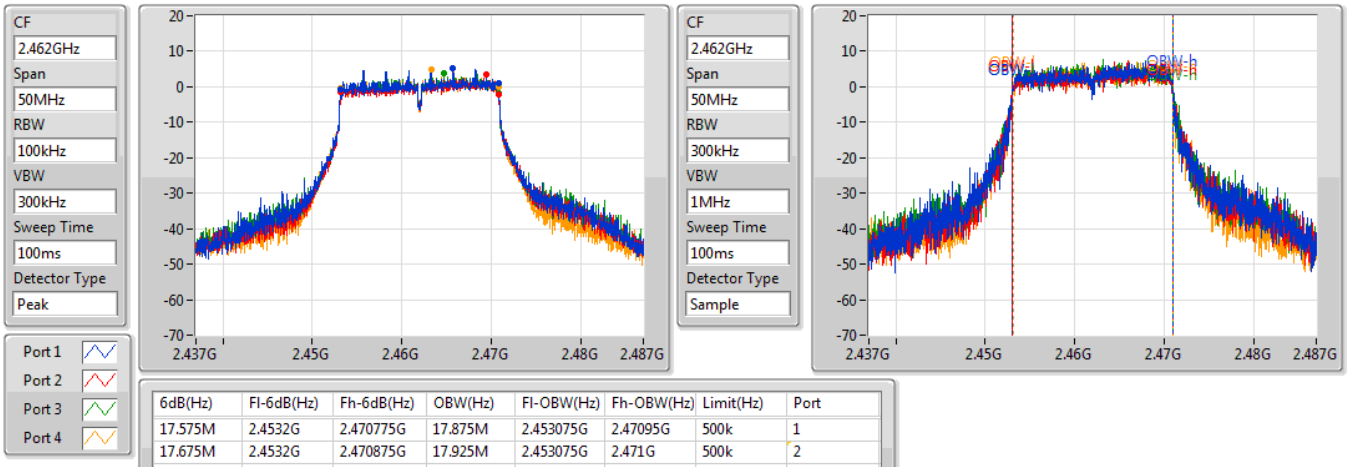


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.6M	2.428175G	2.445775G	23.225M	2.4245G	2.447725G	500k	1
17.75M	2.4281G	2.44585G	22.425M	2.42495G	2.447375G	500k	2
17.575M	2.4282G	2.445775G	24.35M	2.4239G	2.44825G	500k	3
17.525M	2.428225G	2.44575G	20.75M	2.42605G	2.4468G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2462MHz

05/02/2021

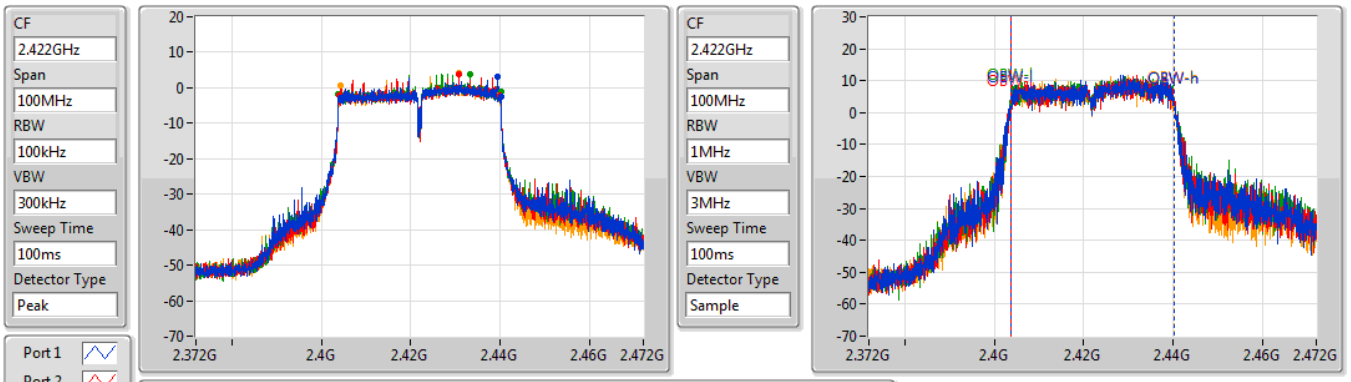


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.4532G	2.470775G	17.875M	2.453075G	2.47095G	500k	1
17.675M	2.4532G	2.470875G	17.925M	2.453075G	2.471G	500k	2
17.675M	2.4532G	2.470875G	17.875M	2.453075G	2.47095G	500k	3
17.55M	2.453225G	2.470775G	17.825M	2.4531G	2.470925G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2422MHz

05/02/2021

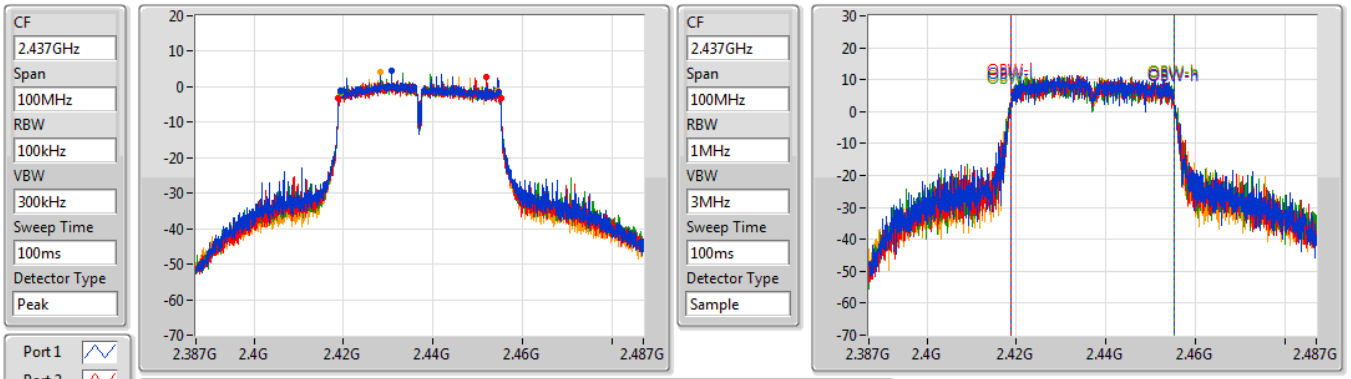


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.9M	2.40425G	2.44015G	36.6M	2.4037G	2.4403G	500k	1
36M	2.4041G	2.4401G	36.6M	2.40375G	2.44035G	500k	2
36.3M	2.40385G	2.44015G	36.55M	2.4037G	2.44025G	500k	3
35.4M	2.40445G	2.43985G	36.45M	2.4038G	2.44025G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2437MHz

05/02/2021

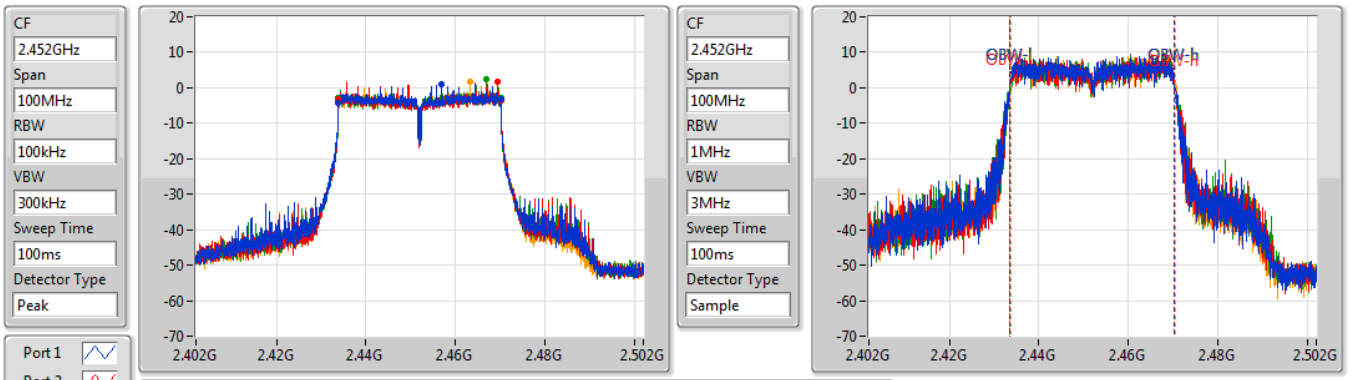


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.55M	2.4192G	2.45475G	36.45M	2.41875G	2.4552G	500k	1
36.3M	2.41885G	2.45515G	36.4M	2.41875G	2.45515G	500k	2
35.55M	2.4192G	2.45475G	36.55M	2.41875G	2.4553G	500k	3
35.05M	2.41945G	2.4545G	36.45M	2.41875G	2.4552G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2452MHz

05/02/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.35M	2.4338G	2.47015G	36.7M	2.4336G	2.4703G	500k	1
36.3M	2.43385G	2.47015G	36.8M	2.43355G	2.47035G	500k	2
36.3M	2.43385G	2.47015G	36.7M	2.4336G	2.4703G	500k	3
36.3M	2.43385G	2.47015G	36.75M	2.43365G	2.4704G	500k	4

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	10.2M	15.942M	15M9G1D	10.125M	10.495M
802.11g_Nss1,(6Mbps)_4TX	16.35M	22.039M	22M0D1D	16.3M	16.667M
802.11ax HEW20_Nss1,(MCS0)_4TX	17.6M	21.064M	21M1D1D	17.55M	17.816M
802.11ax HEW40_Nss1,(MCS0)_4TX	36.35M	36.682M	36M7D1D	35.05M	36.332M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

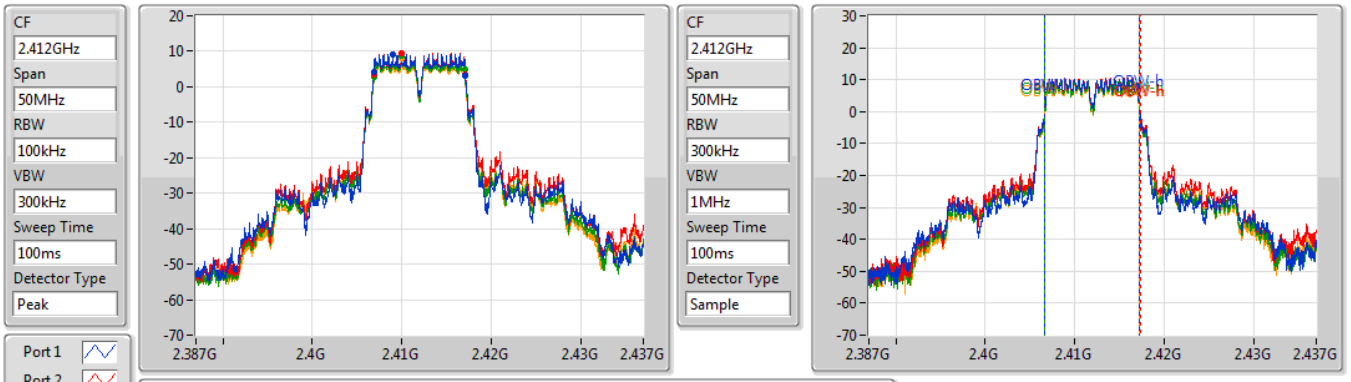
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	10.2M	10.57M	10.2M	10.67M	10.15M	10.595M	10.15M	10.62M
2437MHz	Pass	500k	10.125M	13.118M	10.125M	15.942M	10.125M	15.217M	10.125M	15.617M
2462MHz	Pass	500k	10.15M	10.495M	10.125M	10.495M	10.15M	10.52M	10.15M	10.52M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.817M	16.35M	17.016M	16.35M	16.767M	16.35M	16.817M
2437MHz	Pass	500k	16.3M	18.866M	16.325M	22.039M	16.325M	20.515M	16.325M	21.839M
2462MHz	Pass	500k	16.3M	16.667M	16.3M	16.717M	16.3M	16.742M	16.325M	16.742M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.6M	17.991M	17.55M	17.991M	17.6M	18.016M	17.6M	17.991M
2437MHz	Pass	500k	17.575M	18.616M	17.575M	20.365M	17.575M	19.79M	17.55M	21.064M
2462MHz	Pass	500k	17.575M	17.916M	17.575M	17.816M	17.6M	17.966M	17.55M	17.916M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.05M	36.482M	35.9M	36.532M	36M	36.532M	36.3M	36.632M
2437MHz	Pass	500k	35.45M	36.382M	36.3M	36.532M	35.05M	36.332M	36.3M	36.432M
2452MHz	Pass	500k	36.3M	36.632M	36.3M	36.532M	36.3M	36.632M	36.35M	36.682M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_4TX EBW

2412MHz

05/02/2021

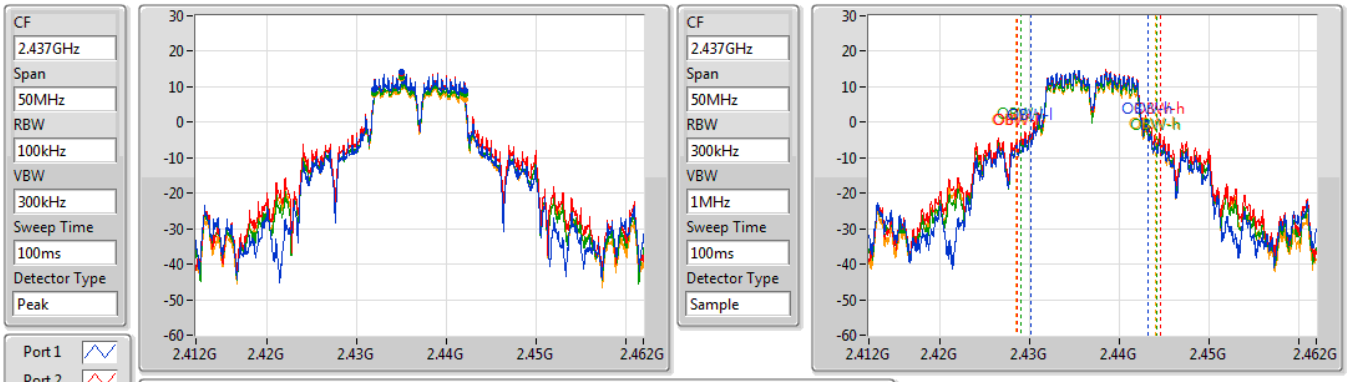


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.2M	2.4069G	2.4171G	10.57M	2.406678G	2.417247G	500k	1
10.2M	2.4069G	2.4171G	10.67M	2.406678G	2.417347G	500k	2
10.15M	2.4069G	2.41705G	10.595M	2.406678G	2.417272G	500k	3
10.15M	2.4069G	2.41705G	10.62M	2.406653G	2.417272G	500k	4

802.11b_Nss1,(1Mbps)_4TX EBW

2437MHz

05/02/2021

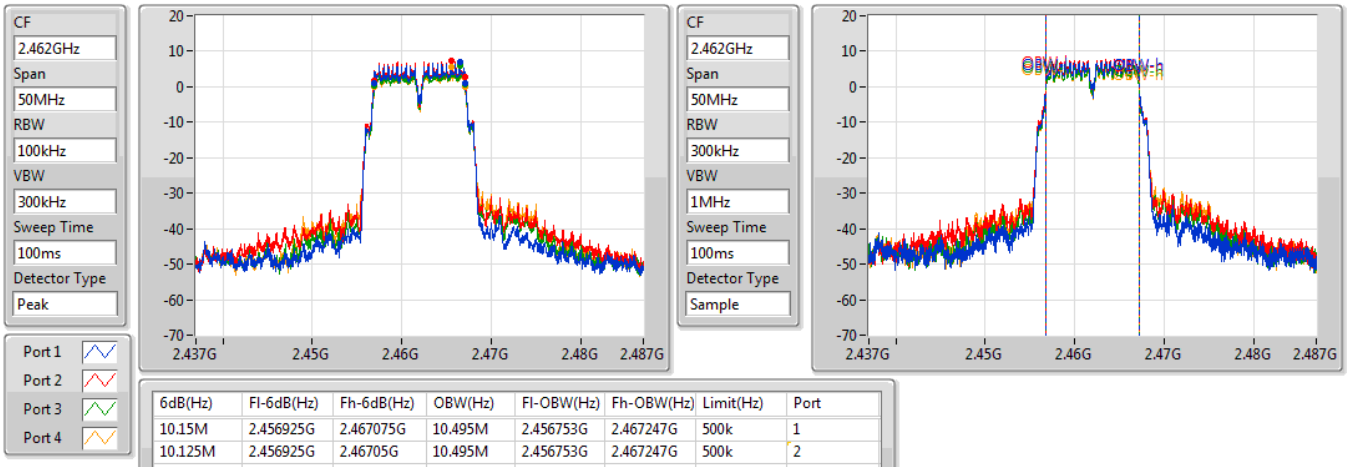


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.125M	2.431925G	2.44205G	13.118M	2.430053G	2.443172G	500k	1
10.125M	2.431925G	2.44205G	15.942M	2.428579G	2.444521G	500k	2
10.125M	2.431925G	2.44205G	15.217M	2.428929G	2.444146G	500k	3
10.125M	2.431925G	2.44205G	15.617M	2.428479G	2.444096G	500k	4

802.11b_Nss1,(1Mbps)_4TX EBW

2462MHz

05/02/2021

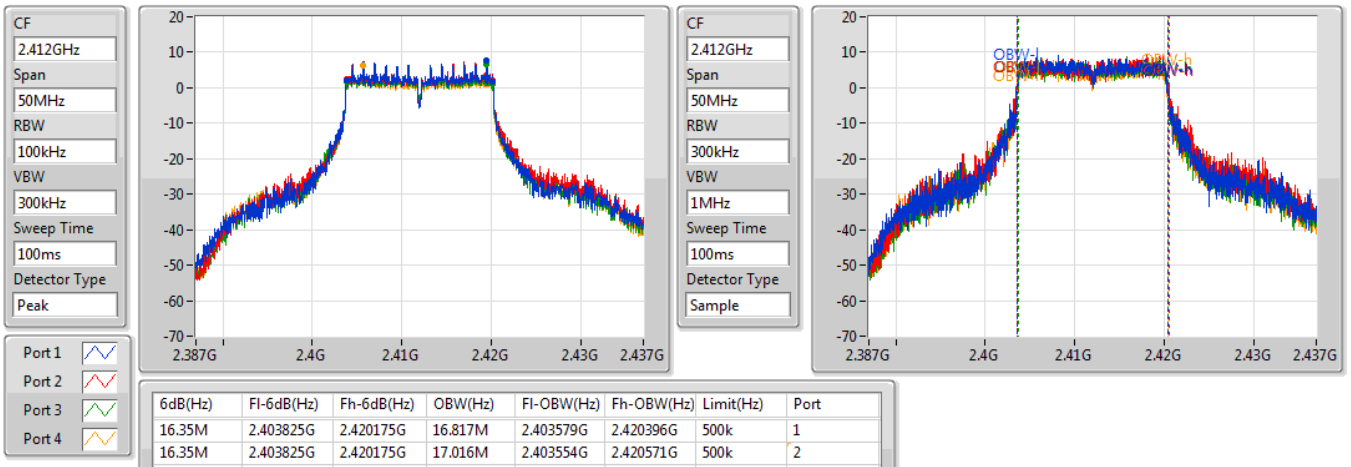


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.15M	2.456925G	2.467075G	10.495M	2.456753G	2.467247G	500k	1
10.125M	2.456925G	2.46705G	10.495M	2.456753G	2.467247G	500k	2
10.15M	2.456925G	2.467075G	10.52M	2.456753G	2.467272G	500k	3
10.15M	2.456925G	2.467075G	10.52M	2.456753G	2.467272G	500k	4

802.11g_Nss1,(6Mbps)_4TX EBW

2412MHz

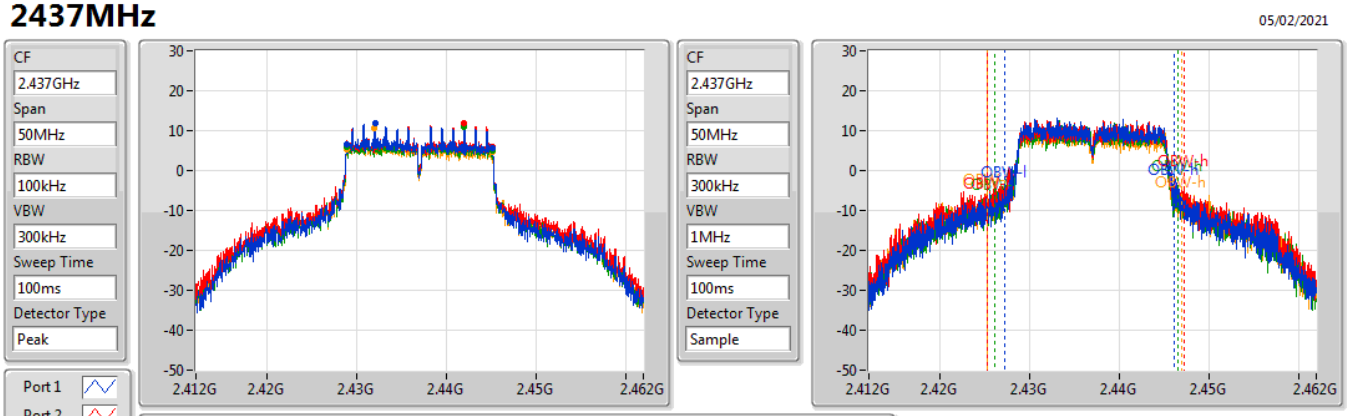
05/02/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.403825G	2.420175G	16.817M	2.403579G	2.420396G	500k	1
16.35M	2.403825G	2.420175G	17.016M	2.403554G	2.420571G	500k	2
16.35M	2.403825G	2.420175G	16.767M	2.403654G	2.420421G	500k	3
16.35M	2.403825G	2.420175G	16.817M	2.403579G	2.420396G	500k	4

802.11g_Nss1,(6Mbps)_4TX EBW

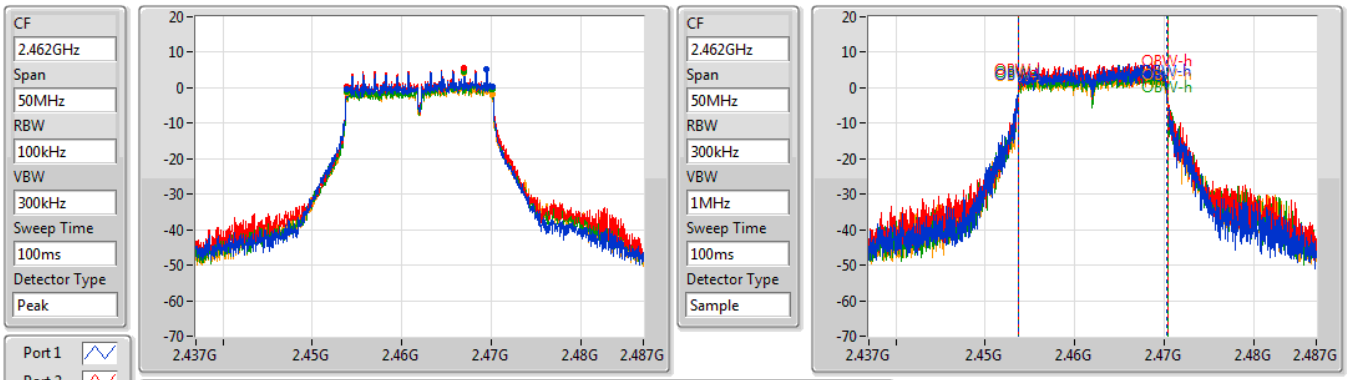
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.428825G	2.445125G	18.866M	2.42723G	2.446095G	500k	1
16.325M	2.428825G	2.44515G	22.039M	2.425256G	2.447295G	500k	2
16.325M	2.428825G	2.44515G	20.515M	2.42603G	2.446545G	500k	3
16.325M	2.428825G	2.44515G	21.839M	2.425181G	2.44702G	500k	4

802.11g_Nss1,(6Mbps)_4TX EBW

2462MHz

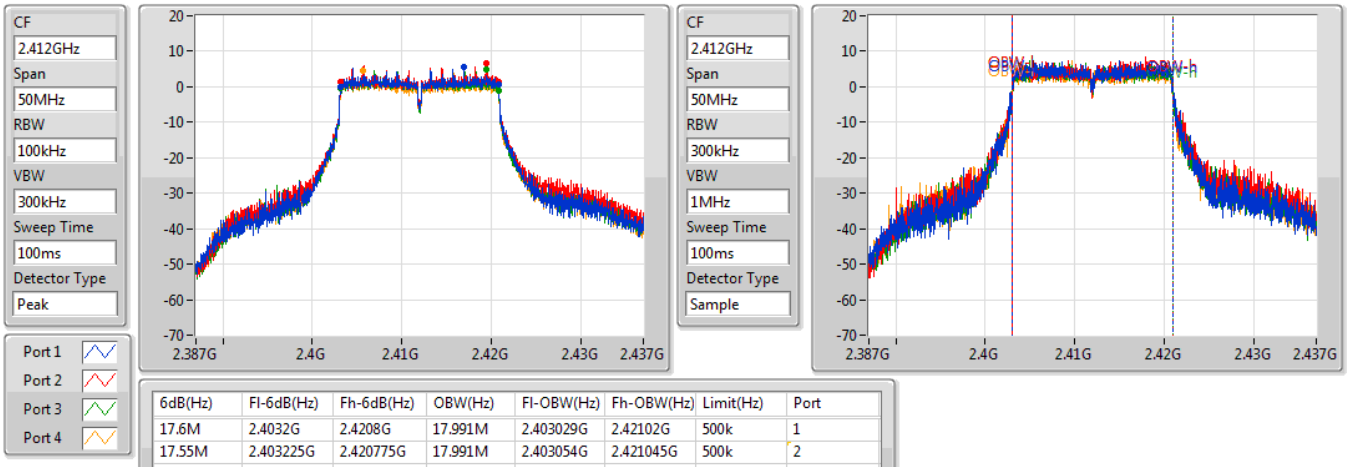


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.667M	2.453654G	2.470321G	500k	1
16.3M	2.45385G	2.47015G	16.717M	2.453654G	2.470371G	500k	2
16.3M	2.45385G	2.47015G	16.742M	2.453679G	2.470421G	500k	3
16.325M	2.45385G	2.470175G	16.742M	2.453654G	2.470396G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2412MHz

05/02/2021

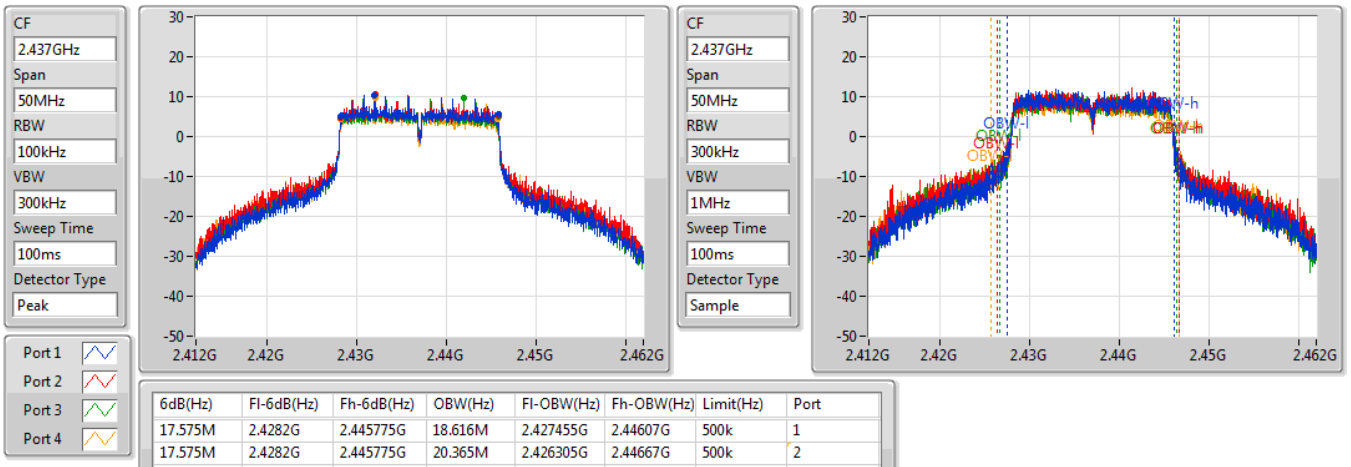


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.6M	2.4032G	2.4208G	17.991M	2.403029G	2.42102G	500k	1
17.55M	2.403225G	2.420775G	17.991M	2.403054G	2.421045G	500k	2
17.6M	2.4032G	2.4208G	18.016M	2.403004G	2.42102G	500k	3
17.6M	2.4032G	2.4208G	17.991M	2.403004G	2.420996G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2437MHz

05/02/2021

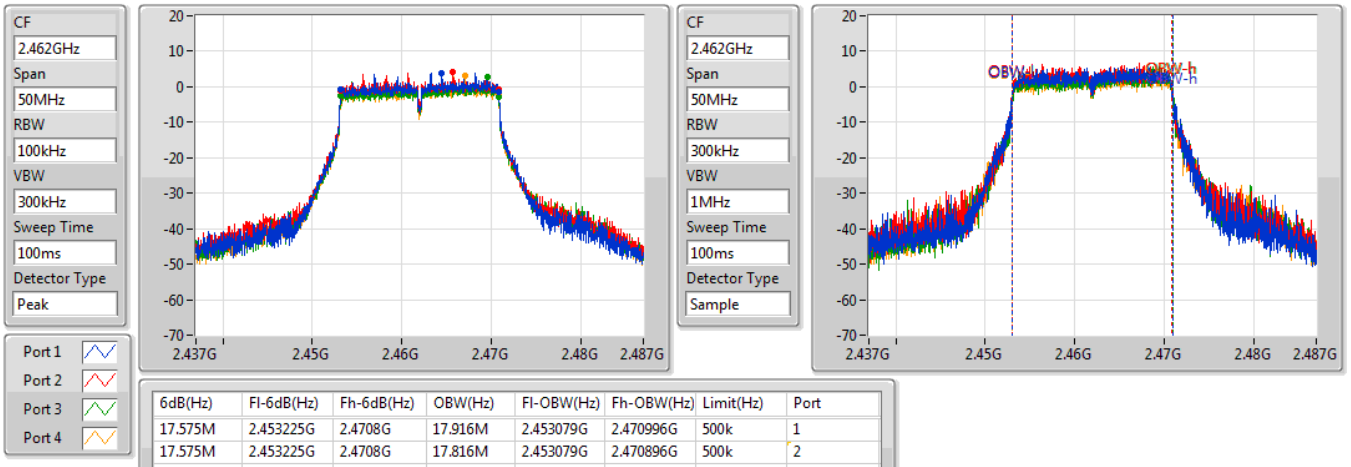


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.4282G	2.445775G	18.616M	2.427455G	2.44607G	500k	1
17.575M	2.4282G	2.445775G	20.365M	2.426305G	2.44667G	500k	2
17.575M	2.4282G	2.445775G	19.79M	2.42668G	2.44647G	500k	3
17.55M	2.4282G	2.44575G	21.064M	2.425681G	2.446745G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

2462MHz

05/02/2021

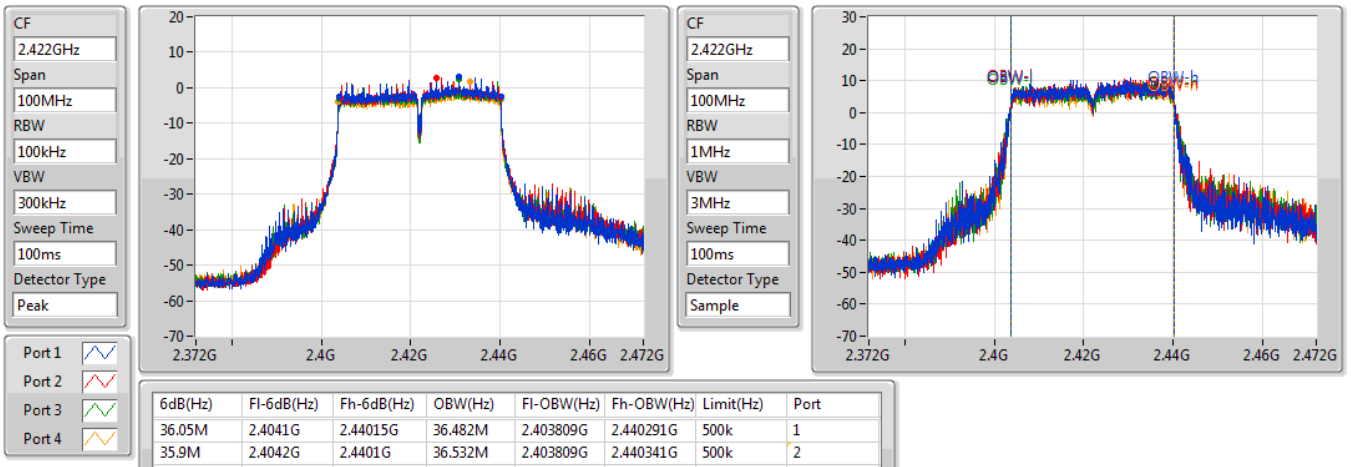


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.453225G	2.4708G	17.916M	2.453079G	2.470996G	500k	1
17.575M	2.453225G	2.4708G	17.816M	2.453079G	2.470896G	500k	2
17.6M	2.4532G	2.4708G	17.966M	2.453079G	2.471045G	500k	3
17.55M	2.453225G	2.470775G	17.916M	2.453079G	2.470996G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2422MHz

05/02/2021

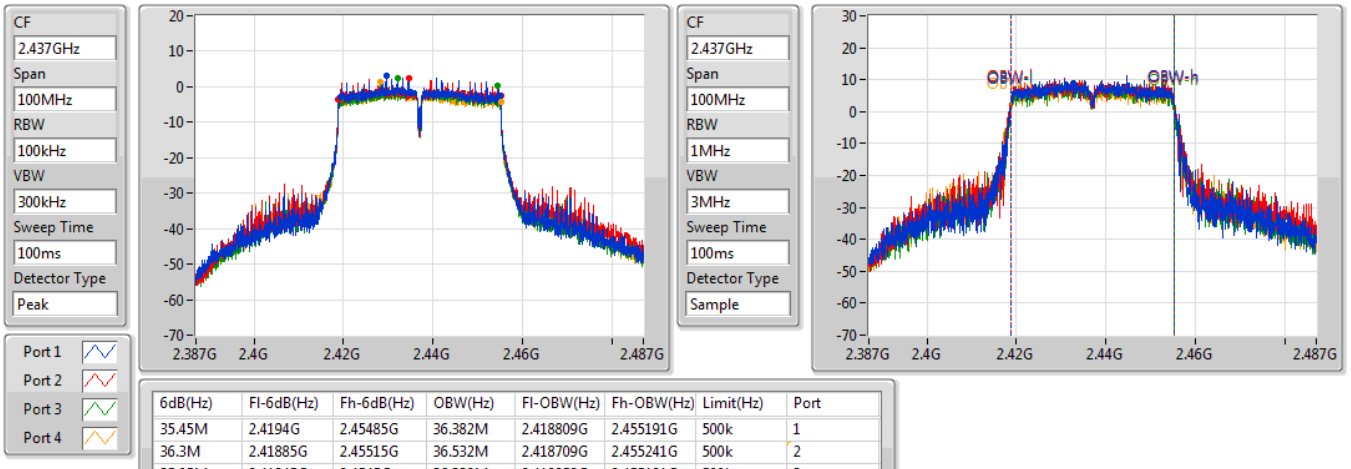


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.05M	2.4041G	2.44015G	36.482M	2.403809G	2.440291G	500k	1
35.9M	2.4042G	2.4401G	36.532M	2.403809G	2.440341G	500k	2
36M	2.4041G	2.4401G	36.532M	2.403809G	2.440341G	500k	3
36.3M	2.40385G	2.44015G	36.632M	2.403709G	2.440341G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2437MHz

05/02/2021

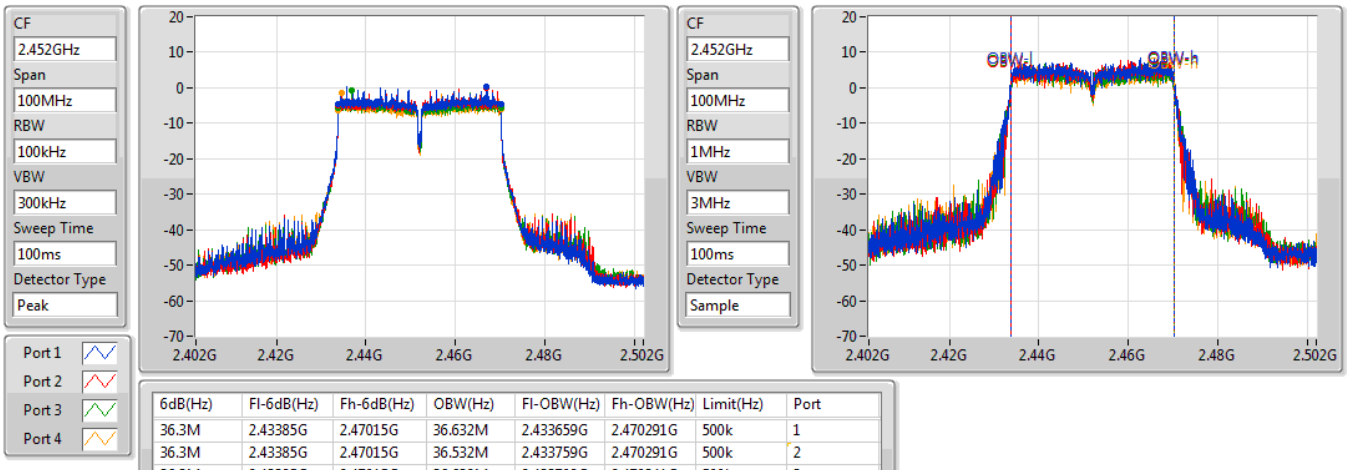


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.45M	2.4194G	2.45485G	36.382M	2.418809G	2.455191G	500k	1
36.3M	2.41885G	2.45515G	36.532M	2.418709G	2.455241G	500k	2
35.05M	2.41945G	2.4545G	36.332M	2.418859G	2.455191G	500k	3
36.3M	2.41885G	2.45515G	36.432M	2.418759G	2.455191G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

2452MHz

05/02/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.43385G	2.47015G	36.632M	2.433659G	2.470291G	500k	1
36.3M	2.43385G	2.47015G	36.532M	2.433759G	2.470291G	500k	2
36.3M	2.43385G	2.47015G	36.632M	2.433709G	2.470341G	500k	3
36.35M	2.4338G	2.47015G	36.682M	2.433659G	2.470341G	500k	4

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.1M	19.415M	19M4D1D	17.75M	18.716M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.7M	38.231M	38M2D1D	13.2M	37.631M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

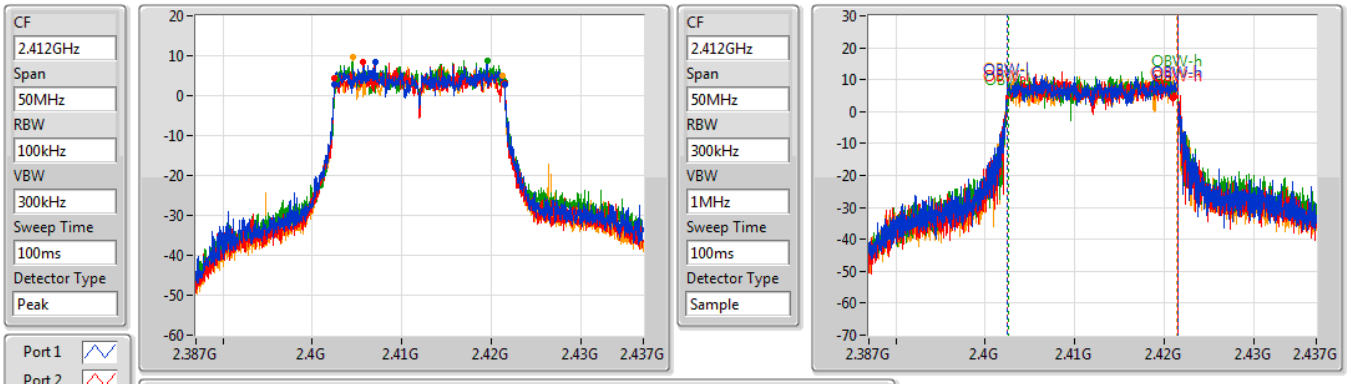
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	19.1M	19.115M	18.975M	19.09M	18.825M	18.966M	18.575M	19.015M
2437MHz	Pass	500k	18.725M	19.29M	18.8M	19.29M	18.675M	19.415M	18.075M	19.165M
2462MHz	Pass	500k	19.025M	19.04M	17.75M	19.04M	18.225M	18.716M	18.825M	18.966M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.3M	37.931M	37.7M	38.081M	32.55M	37.931M	37.2M	37.881M
2437MHz	Pass	500k	33.85M	37.631M	35.65M	37.631M	36.3M	38.031M	13.2M	37.781M
2452MHz	Pass	500k	37.6M	38.081M	36.65M	38.081M	13.8M	38.031M	33.8M	38.231M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2412MHz

24/02/2021

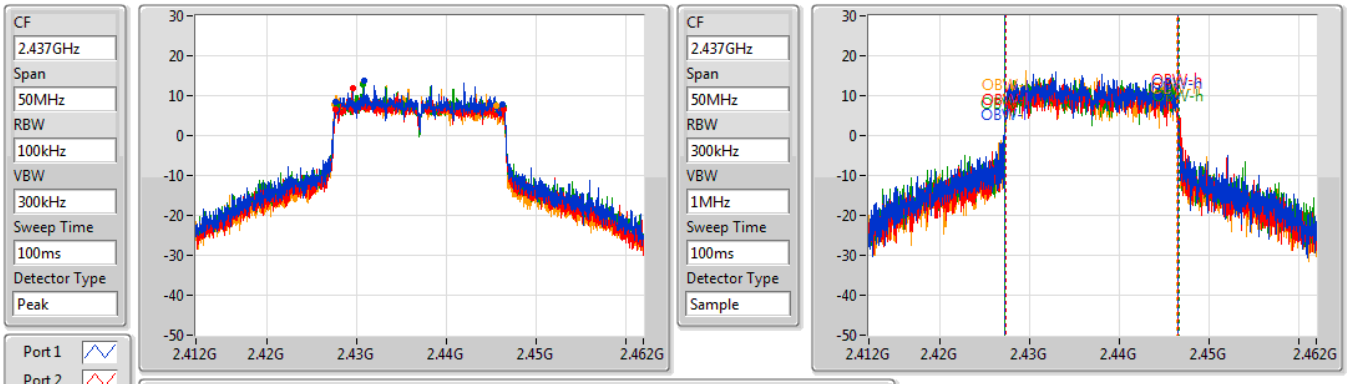


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.1M	2.40245G	2.42155G	19.115M	2.40243G	2.421545G	500k	1
18.975M	2.402525G	2.4215G	19.09M	2.40243G	2.42152G	500k	2
18.825M	2.4027G	2.421525G	18.966M	2.402555G	2.42152G	500k	3
18.575M	2.402625G	2.4212G	19.015M	2.402455G	2.42147G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2437MHz

17/03/2021

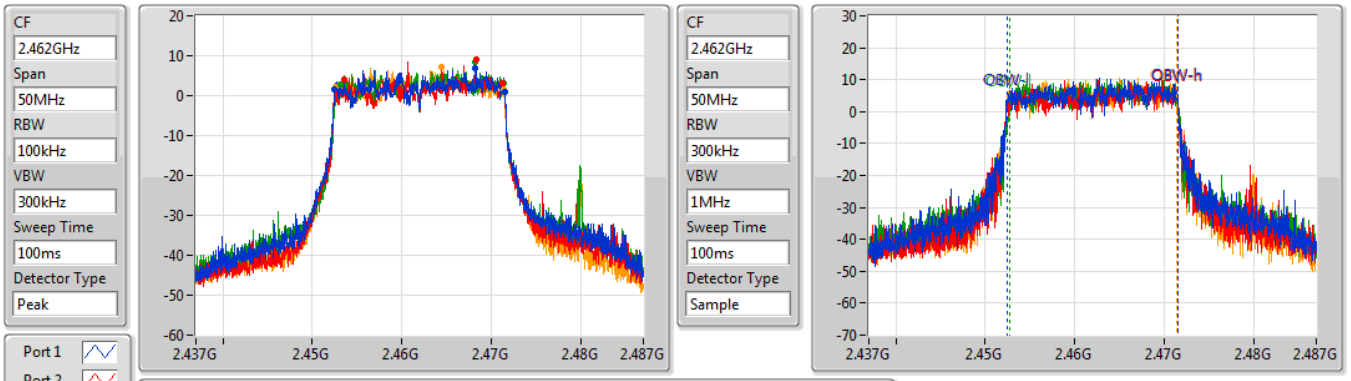


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.725M	2.4276G	2.446325G	19.29M	2.42723G	2.44652G	500k	1
18.8M	2.427625G	2.446425G	19.29M	2.427305G	2.446595G	500k	2
18.675M	2.427725G	2.4464G	19.415M	2.427205G	2.44662G	500k	3
18.075M	2.427475G	2.44555G	19.165M	2.427305G	2.44647G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2462MHz

24/02/2021

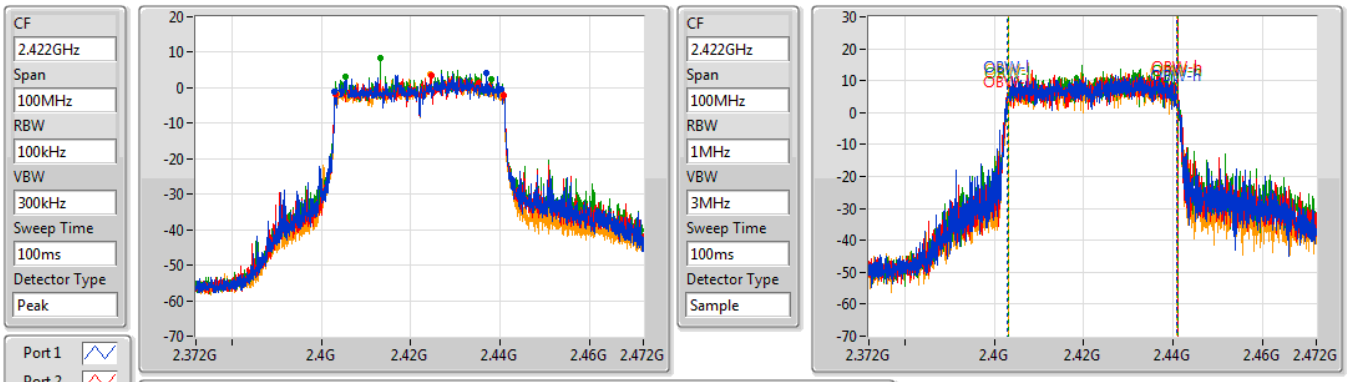


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.025M	2.4525G	2.471525G	19.04M	2.452455G	2.471495G	500k	1
17.75M	2.45355G	2.4713G	19.04M	2.452455G	2.471495G	500k	2
18.225M	2.453175G	2.4714G	18.716M	2.452805G	2.47152G	500k	3
18.825M	2.452575G	2.4714G	18.966M	2.45248G	2.471445G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

2422MHz

05/03/2021

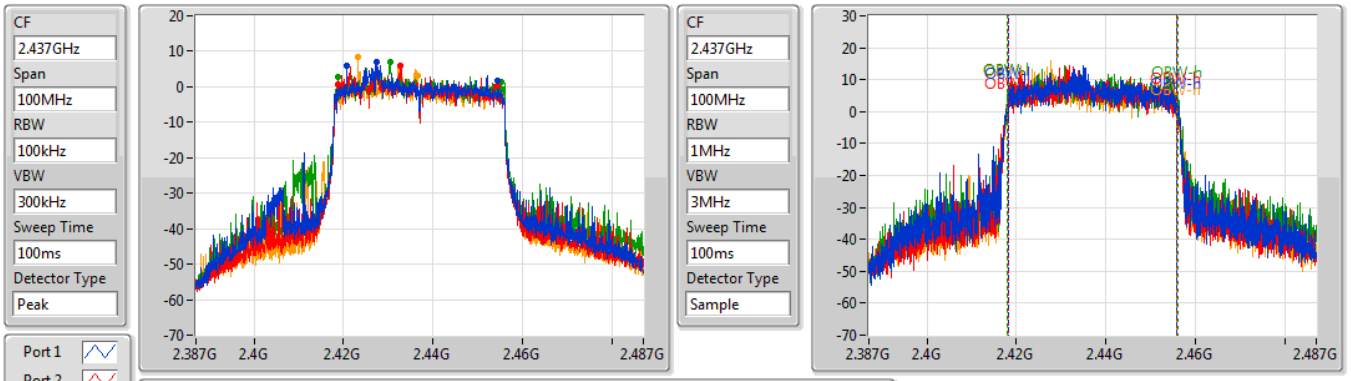


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.3M	2.40305G	2.44035G	37.931M	2.403009G	2.440941G	500k	1
37.7M	2.4031G	2.4408G	38.081M	2.40291G	2.440991G	500k	2
32.55M	2.40535G	2.4379G	37.931M	2.403059G	2.440991G	500k	3
37.2M	2.40335G	2.44055G	37.881M	2.403059G	2.440941G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

2437MHz

05/03/2021

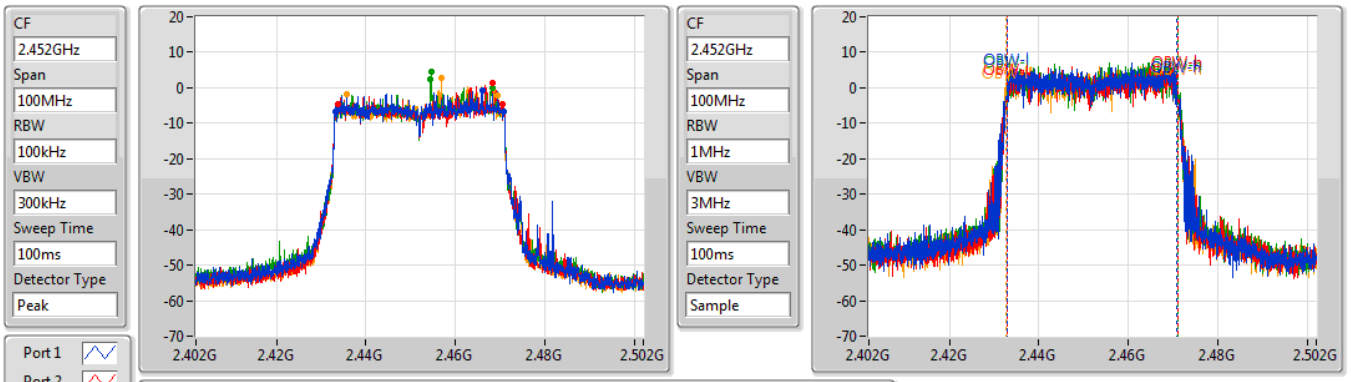


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.85M	2.42065G	2.4545G	37.631M	2.418109G	2.455741G	500k	1
35.65M	2.4188G	2.45445G	37.631M	2.418109G	2.455741G	500k	2
36.3M	2.41885G	2.45515G	38.031M	2.41796G	2.455991G	500k	3
13.2M	2.42325G	2.43645G	37.781M	2.418009G	2.455791G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

2452MHz

05/03/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.6M	2.4331G	2.4707G	38.081M	2.43286G	2.470941G	500k	1
36.65M	2.43375G	2.4704G	38.081M	2.43296G	2.47104G	500k	2
13.8M	2.45445G	2.46825G	38.031M	2.433009G	2.47104G	500k	3
33.8M	2.4357G	2.4695G	38.231M	2.43276G	2.470991G	500k	4

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.05M	22.914M	22M9D1D	16.7M	18.891M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.6M	38.081M	38M1D1D	7.85M	37.681M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

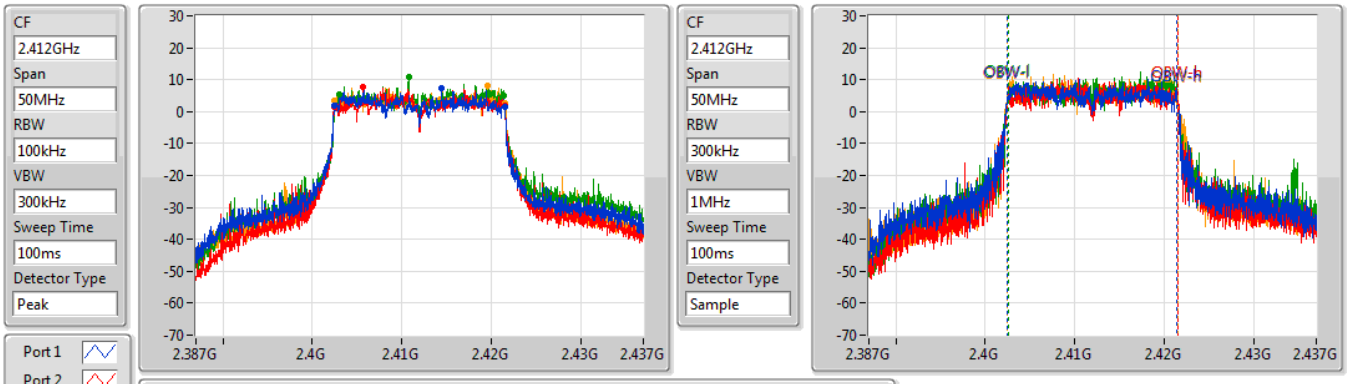
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	19.015M	19.05M	19.09M	18.35M	18.941M	18.975M	19.04M
2437MHz	Pass	500k	18.8M	22.714M	18.575M	20.765M	18.7M	22.914M	18.675M	19.565M
2462MHz	Pass	500k	18.8M	19.065M	18.9M	19.065M	16.7M	18.891M	18.7M	18.916M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.05M	37.931M	37.6M	37.781M	37.05M	37.831M	36.7M	37.881M
2437MHz	Pass	500k	7.85M	37.781M	10.9M	37.681M	33.9M	37.931M	35.15M	37.831M
2452MHz	Pass	500k	35.1M	38.081M	35M	38.031M	35.25M	38.031M	37.05M	38.031M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2412MHz

24/02/2021

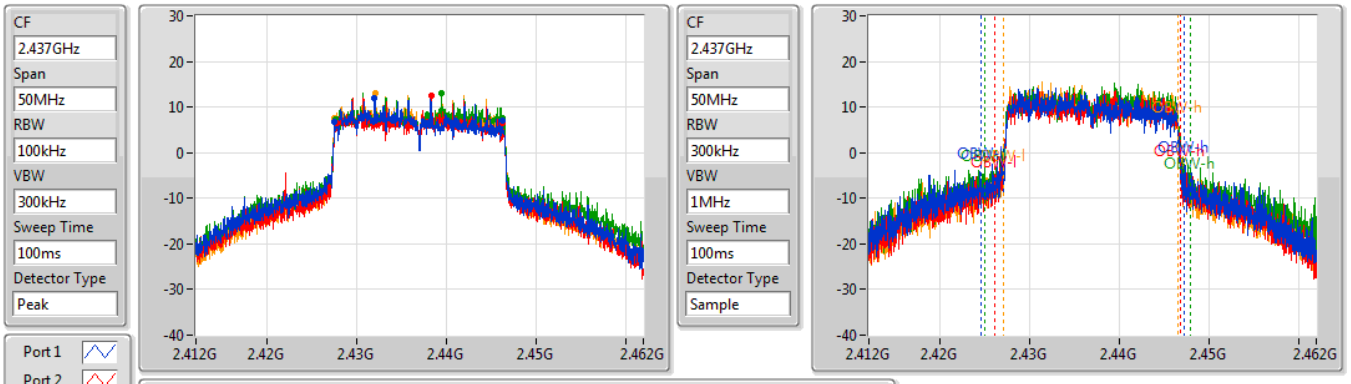


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.402525G	2.4215G	19.015M	2.402455G	2.42147G	500k	1
19.05M	2.402475G	2.421525G	19.09M	2.40248G	2.42157G	500k	2
18.35M	2.40305G	2.4214G	18.941M	2.402555G	2.421495G	500k	3
18.975M	2.402525G	2.4215G	19.04M	2.402455G	2.421495G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2437MHz

17/03/2021

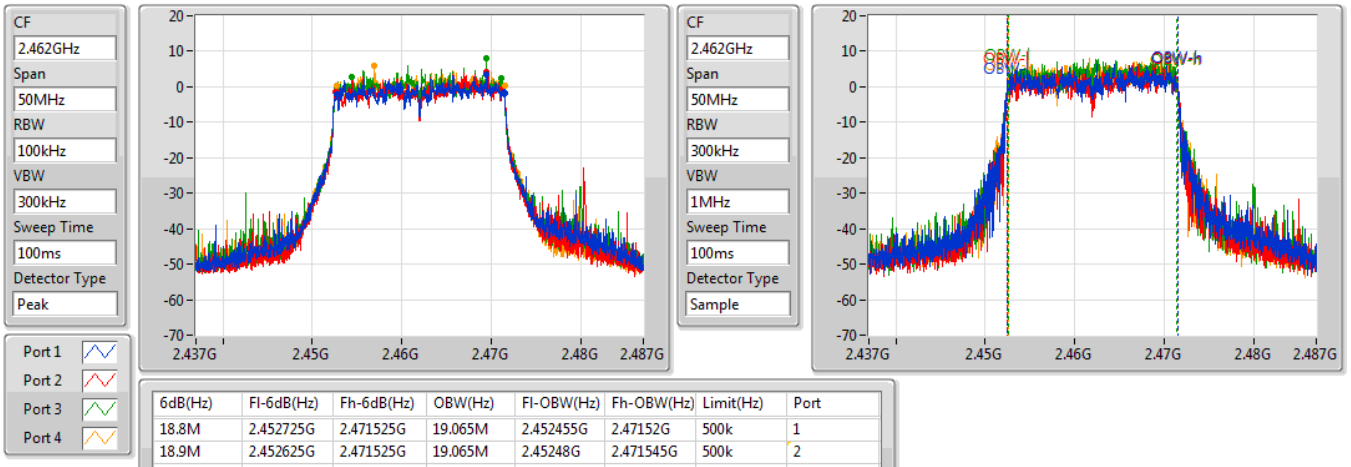


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.8M	2.4275G	2.4463G	22.714M	2.424506G	2.44722G	500k	1
18.575M	2.427725G	2.4463G	20.765M	2.42603G	2.446795G	500k	2
18.7M	2.4276G	2.4463G	22.914M	2.424981G	2.447895G	500k	3
18.675M	2.427525G	2.4462G	19.565M	2.42703G	2.446595G	500k	4

802.11ax HEW20-BF_Nss1,(MCS0)_4TX EBW

2462MHz

24/02/2021

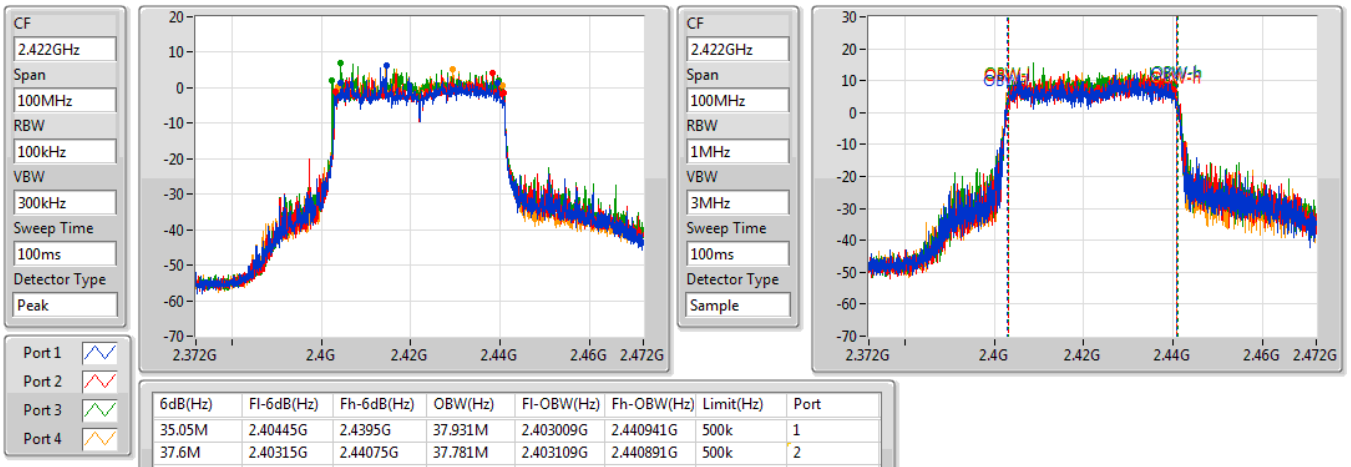


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.8M	2.452725G	2.471525G	19.065M	2.452455G	2.47152G	500k	1
18.9M	2.452625G	2.471525G	19.065M	2.45248G	2.471545G	500k	2
16.7M	2.45445G	2.47115G	18.891M	2.45253G	2.47142G	500k	3
18.7M	2.4528G	2.4715G	18.916M	2.45253G	2.471445G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

2422MHz

05/03/2021

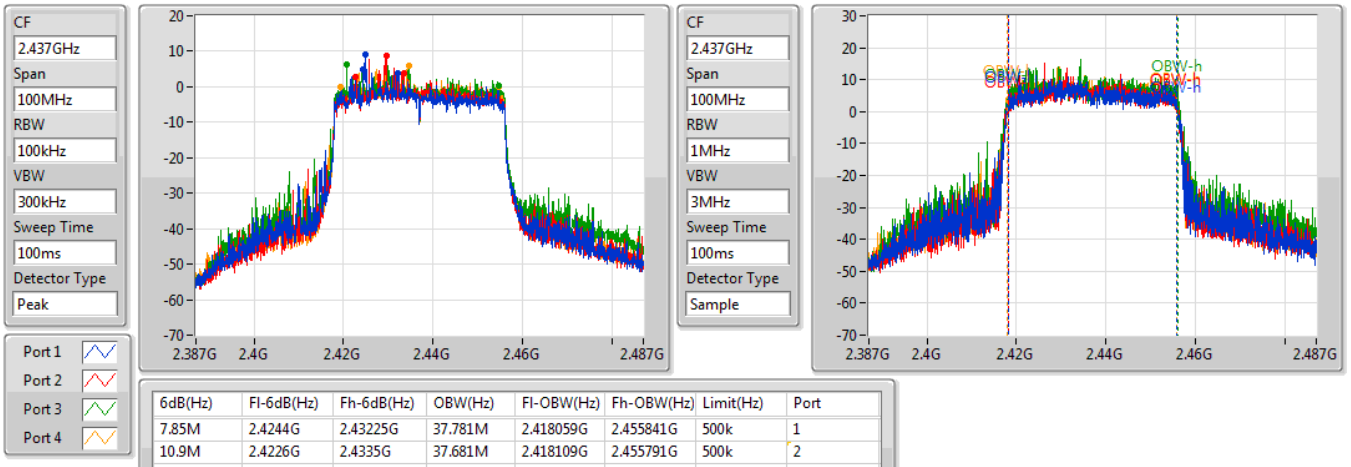


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	2.40445G	2.4395G	37.931M	2.403009G	2.440941G	500k	1
37.6M	2.40315G	2.44075G	37.781M	2.403109G	2.440891G	500k	2
37.05M	2.4025G	2.43955G	37.831M	2.403159G	2.440991G	500k	3
36.7M	2.4037G	2.4404G	37.881M	2.403059G	2.440941G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

2437MHz

05/03/2021

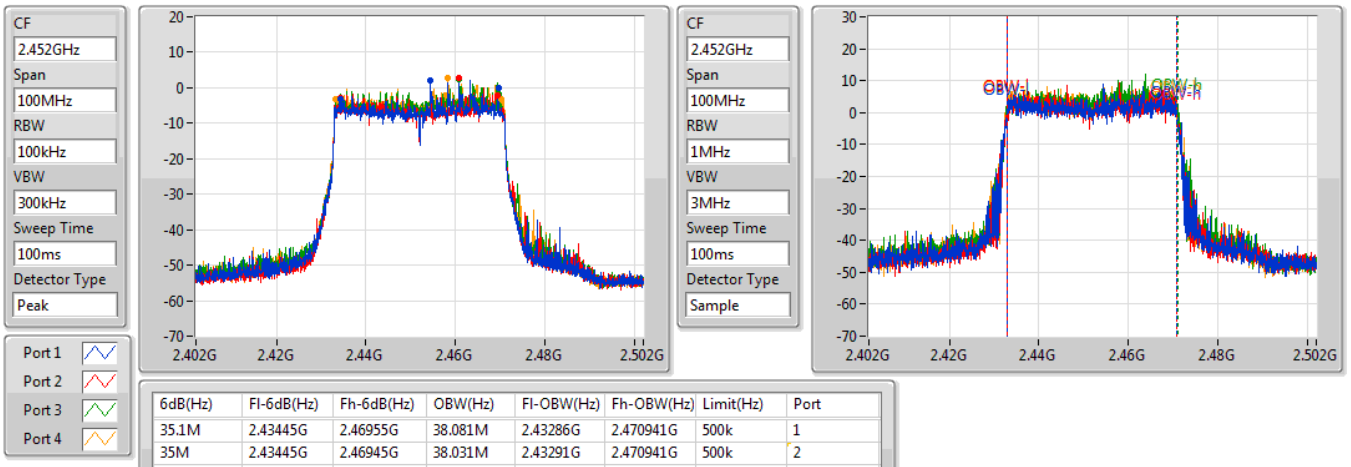


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.85M	2.4244G	2.43225G	37.781M	2.418059G	2.455841G	500k	1
10.9M	2.4226G	2.4335G	37.681M	2.418109G	2.455791G	500k	2
33.9M	2.42065G	2.45455G	37.931M	2.418059G	2.455991G	500k	3
35.15M	2.41945G	2.4546G	37.831M	2.418009G	2.455841G	500k	4

802.11ax HEW40-BF_Nss1,(MCS0)_4TX EBW

2452MHz

05/03/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.1M	2.43445G	2.46955G	38.081M	2.43286G	2.470941G	500k	1
35M	2.43445G	2.46945G	38.031M	2.43291G	2.470941G	500k	2
35.25M	2.4344G	2.46965G	38.031M	2.433009G	2.47104G	500k	3
37.05M	2.4332G	2.47025G	38.031M	2.43291G	2.470941G	500k	4

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.88	0.97275
802.11g_Nss1,(6Mbps)_4TX	28.31	0.67764
802.11ax HEW20_Nss1,(MCS0)_4TX	29.18	0.82794
802.11ax HEW40_Nss1,(MCS0)_4TX	24.76	0.29923

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	-0.25	21.22	20.92	21.46	20.61	27.08	30.00
2417MHz	Pass	-0.25	22.87	22.87	23.43	22.81	29.02	30.00
2422MHz	Pass	-0.25	23.19	22.84	23.35	23.24	29.18	30.00
2427MHz	Pass	-0.25	23.84	23.81	23.85	23.76	29.84	30.00
2437MHz	Pass	-0.25	23.75	23.75	24.22	23.69	29.88	30.00
2442MHz	Pass	-0.25	23.87	23.53	23.55	23.43	29.62	30.00
2447MHz	Pass	-0.25	23.42	23.13	23.16	22.91	29.18	30.00
2452MHz	Pass	-0.25	22.81	22.45	22.71	22.30	28.59	30.00
2457MHz	Pass	-0.25	22.13	21.87	22.46	22.13	28.17	30.00
2462MHz	Pass	-0.25	19.68	19.48	19.24	19.80	25.58	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	-0.25	17.31	17.39	17.54	16.99	23.33	30.00
2417MHz	Pass	-0.25	20.37	20.18	20.93	20.24	26.46	30.00
2422MHz	Pass	-0.25	22.36	22.06	22.27	22.20	28.24	30.00
2437MHz	Pass	-0.25	22.07	22.03	22.42	22.00	28.15	30.00
2442MHz	Pass	-0.25	22.39	22.22	22.52	22.01	28.31	30.00
2447MHz	Pass	-0.25	21.51	21.26	21.63	21.06	27.39	30.00
2452MHz	Pass	-0.25	20.03	19.85	19.93	19.67	25.89	30.00
2457MHz	Pass	-0.25	16.63	16.33	17.13	16.59	22.70	30.00
2462MHz	Pass	-0.25	16.97	16.50	17.21	16.81	22.90	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	-0.25	18.42	18.47	18.86	18.34	24.55	30.00
2417MHz	Pass	-0.25	21.04	20.94	21.65	20.91	27.17	30.00
2422MHz	Pass	-0.25	22.39	22.14	22.47	22.45	28.39	30.00
2427MHz	Pass	-0.25	23.14	22.98	23.27	23.25	29.18	30.00
2437MHz	Pass	-0.25	22.55	22.55	22.99	22.53	28.68	30.00
2442MHz	Pass	-0.25	22.21	21.97	22.26	21.79	28.08	30.00
2447MHz	Pass	-0.25	20.95	20.73	20.83	20.44	26.76	30.00
2452MHz	Pass	-0.25	20.16	19.91	20.27	19.77	26.05	30.00
2457MHz	Pass	-0.25	18.60	18.26	18.75	18.62	24.58	30.00
2462MHz	Pass	-0.25	16.71	16.39	17.05	16.66	22.73	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	-0.25	17.71	17.38	18.02	17.52	23.68	30.00
2427MHz	Pass	-0.25	18.74	18.67	19.03	18.49	24.76	30.00
2437MHz	Pass	-0.25	18.24	18.12	18.32	18.11	24.22	30.00
2442MHz	Pass	-0.25	18.22	18.00	18.02	17.83	24.04	30.00
2447MHz	Pass	-0.25	15.87	15.85	16.19	16.05	22.01	30.00
2452MHz	Pass	-0.25	16.04	15.78	16.16	15.99	22.02	30.00

DG = Directional Gain; Port X = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.24	0.83946
802.11g_Nss1,(6Mbps)_4TX	28.03	0.63533
802.11ax HEW20_Nss1,(MCS0)_4TX	27.48	0.55976
802.11ax HEW40_Nss1,(MCS0)_4TX	22.94	0.19679

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	-0.25	19.78	20.02	19.34	18.50	25.47	30.00
2417MHz	Pass	-0.25	22.50	22.67	21.60	20.96	28.01	30.00
2422MHz	Pass	-0.25	20.85	21.19	22.75	22.70	27.98	30.00
2427MHz	Pass	-0.25	21.95	22.44	24.02	23.82	29.17	30.00
2437MHz	Pass	-0.25	23.18	23.35	22.14	21.57	28.64	30.00
2442MHz	Pass	-0.25	22.12	22.83	23.93	23.76	29.24	30.00
2447MHz	Pass	-0.25	21.21	21.87	23.23	23.22	28.49	30.00
2452MHz	Pass	-0.25	19.49	19.94	21.55	21.57	26.76	30.00
2457MHz	Pass	-0.25	19.20	19.58	18.17	17.86	24.78	30.00
2462MHz	Pass	-0.25	16.96	17.47	16.04	15.87	22.66	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	-0.25	18.64	18.91	18.11	17.64	24.37	30.00
2417MHz	Pass	-0.25	21.85	22.00	21.07	20.65	27.45	30.00
2437MHz	Pass	-0.25	22.09	22.18	21.47	21.01	27.73	30.00
2442MHz	Pass	-0.25	20.87	21.45	22.73	22.71	28.03	30.00
2447MHz	Pass	-0.25	20.09	20.77	22.03	22.01	27.32	30.00
2452MHz	Pass	-0.25	19.44	19.78	21.42	21.60	26.69	30.00
2457MHz	Pass	-0.25	17.41	17.67	16.48	16.09	22.98	30.00
2462MHz	Pass	-0.25	16.12	16.78	15.47	15.12	21.94	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	-0.25	17.50	17.76	17.20	16.61	23.31	30.00
2417MHz	Pass	-0.25	20.92	21.04	20.19	19.75	26.53	30.00
2422MHz	Pass	-0.25	20.27	20.79	22.23	22.22	27.48	30.00
2437MHz	Pass	-0.25	21.77	21.95	21.12	20.65	27.42	30.00
2442MHz	Pass	-0.25	19.31	20.10	21.26	21.35	26.61	30.00
2447MHz	Pass	-0.25	18.49	19.07	20.61	20.57	25.80	30.00
2452MHz	Pass	-0.25	16.90	17.50	19.00	19.31	24.31	30.00
2457MHz	Pass	-0.25	17.16	17.39	16.23	15.90	22.73	30.00
2462MHz	Pass	-0.25	16.01	16.31	15.08	14.81	21.62	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	-0.25	17.29	17.21	16.75	16.28	22.92	30.00
2437MHz	Pass	-0.25	17.23	17.33	16.82	16.22	22.94	30.00
2442MHz	Pass	-0.25	15.24	15.74	16.92	17.12	22.35	30.00
2447MHz	Pass	-0.25	15.50	15.21	14.57	14.31	20.94	30.00
2452MHz	Pass	-0.25	14.95	14.78	14.13	13.71	20.44	30.00

DG = Directional Gain; Port X = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.71	0.93541
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	24.79	0.30130

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	19.50	18.84	20.01	19.18	25.42	30.00
2417MHz	Pass	5.77	23.44	22.51	23.97	23.56	29.42	30.00
2437MHz	Pass	5.77	24.11	23.29	23.54	23.77	29.71	30.00
2452MHz	Pass	5.77	23.51	22.19	23.75	22.89	29.15	30.00
2457MHz	Pass	5.77	22.47	21.57	22.43	22.33	28.24	30.00
2462MHz	Pass	5.77	17.73	17.02	18.48	17.79	23.81	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.77	18.42	18.79	19.14	18.40	24.72	30.00
2427MHz	Pass	5.77	18.43	18.75	19.38	18.46	24.79	30.00
2437MHz	Pass	5.77	17.74	17.72	18.48	17.17	23.82	30.00
2442MHz	Pass	5.77	16.11	15.30	16.26	15.56	21.85	30.00
2447MHz	Pass	5.77	13.03	12.54	12.89	12.16	18.69	30.00
2452MHz	Pass	5.77	13.73	13.40	13.74	13.42	19.60	30.00

DG = Directional Gain; Port X = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	28.89	0.77446
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	26.61	0.45814

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	17.93	17.54	19.44	18.84	24.52	30.00
2417MHz	Pass	5.77	21.96	21.88	23.43	23.17	28.69	30.00
2437MHz	Pass	5.77	22.13	22.25	23.57	23.34	28.89	30.00
2452MHz	Pass	5.77	22.25	22.24	22.56	22.30	28.36	30.00
2457MHz	Pass	5.77	20.38	20.07	22.02	21.59	27.11	30.00
2462MHz	Pass	5.77	14.26	14.25	16.06	15.88	21.22	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.77	17.19	17.81	18.98	18.73	24.26	30.00
2427MHz	Pass	5.77	14.50	15.09	16.31	16.09	21.58	30.00
2432MHz	Pass	5.77	19.86	19.98	21.26	21.06	26.61	30.00
2437MHz	Pass	5.77	16.34	17.15	16.64	16.55	22.70	30.00
2447MHz	Pass	5.77	18.59	18.92	20.44	20.08	25.60	30.00
2452MHz	Pass	5.77	13.34	12.72	14.46	14.39	19.81	30.00

DG = Directional Gain; Port X = Port X output power

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	3.03
802.11g_Nss1,(6Mbps)_4TX	-0.09
802.11ax HEW20_Nss1,(MCS0)_4TX	0.58
802.11ax HEW40_Nss1,(MCS0)_4TX	-3.23

RBW = 3kHz;

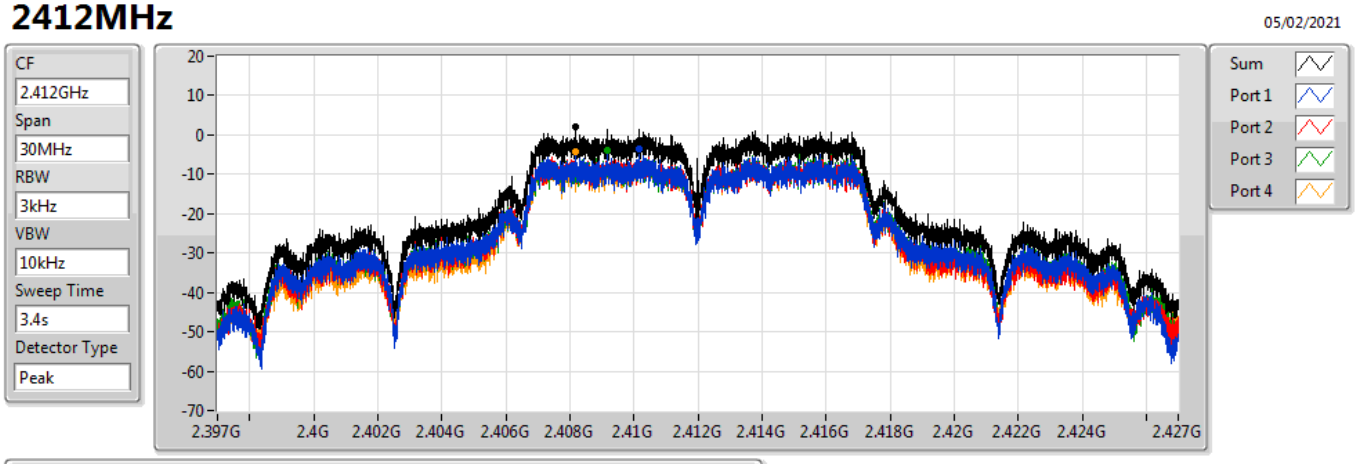
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-3.61	-3.64	-3.86	-4.16	1.94	8.00
2437MHz	Pass	5.77	-2.84	-2.94	-2.82	-2.78	3.03	8.00
2462MHz	Pass	5.77	-5.99	-5.98	-5.66	-5.80	-0.13	8.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-9.14	-8.84	-9.04	-9.99	-3.38	8.00
2437MHz	Pass	5.77	-6.36	-6.18	-5.58	-5.75	-0.09	8.00
2462MHz	Pass	5.77	-9.55	-9.20	-8.38	-8.75	-2.93	8.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-6.64	-7.33	-6.38	-6.84	-1.94	8.00
2437MHz	Pass	5.77	-5.06	-5.25	-4.95	-5.56	0.58	8.00
2462MHz	Pass	5.77	-6.80	-8.60	-9.01	-7.30	-2.65	8.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.77	-9.44	-8.54	-11.70	-11.72	-4.10	8.00
2437MHz	Pass	5.77	-9.40	-6.90	-10.48	-10.07	-3.23	8.00
2452MHz	Pass	5.77	-7.22	-11.27	-14.36	-10.66	-4.18	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_4TX PSD

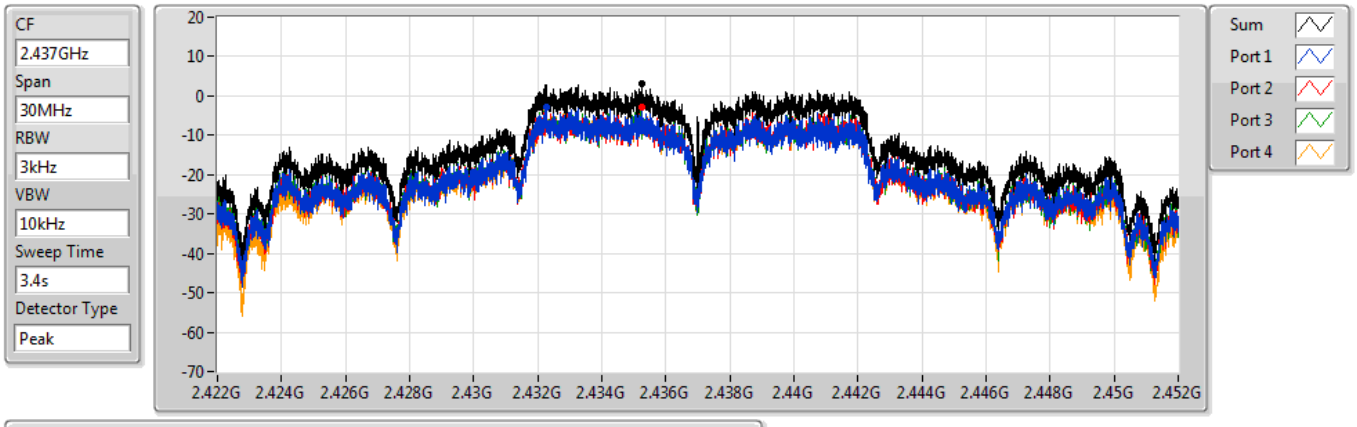
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.94	1.94	-3.61	-3.64	-3.86	-4.16

802.11b_Nss1,(1Mbps)_4TX PSD

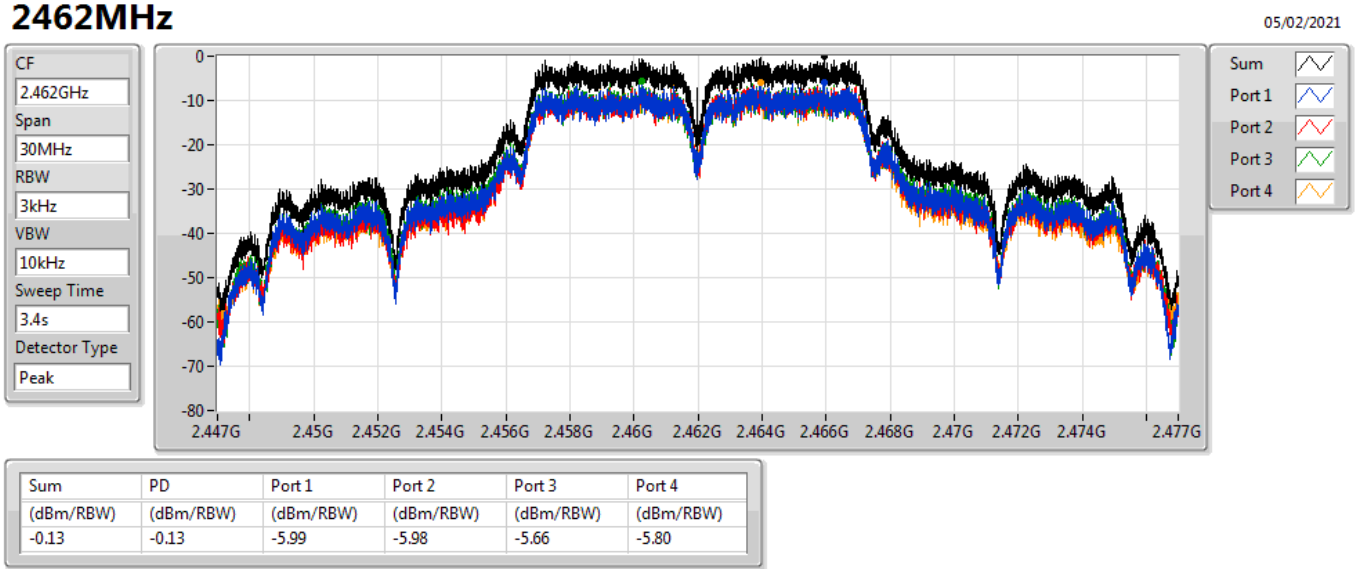
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.03	3.03	-2.84	-2.94	-2.82	-2.78

802.11b_Nss1,(1Mbps)_4TX PSD

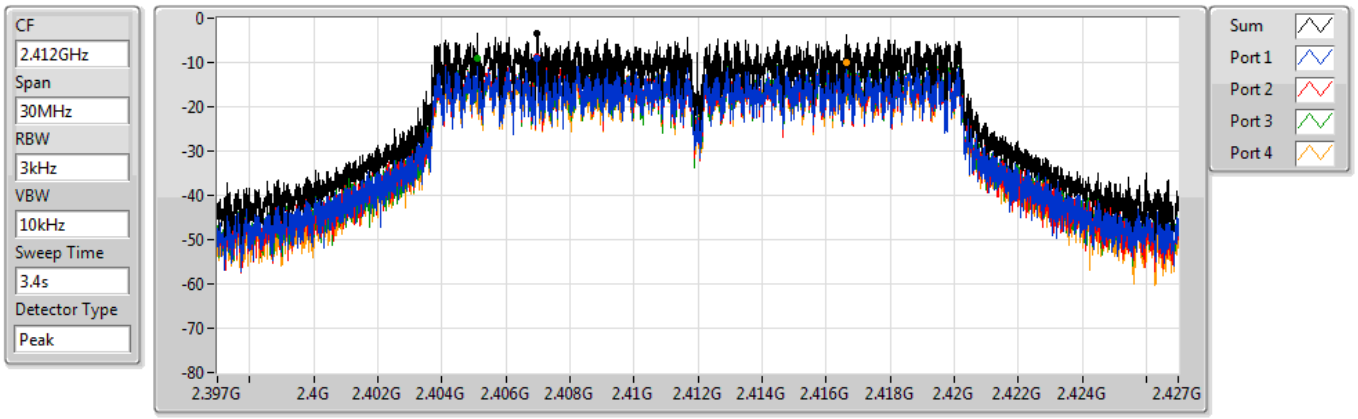
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.13	-0.13	-5.99	-5.98	-5.66	-5.80

802.11g_Nss1,(6Mbps)_4TX PSD

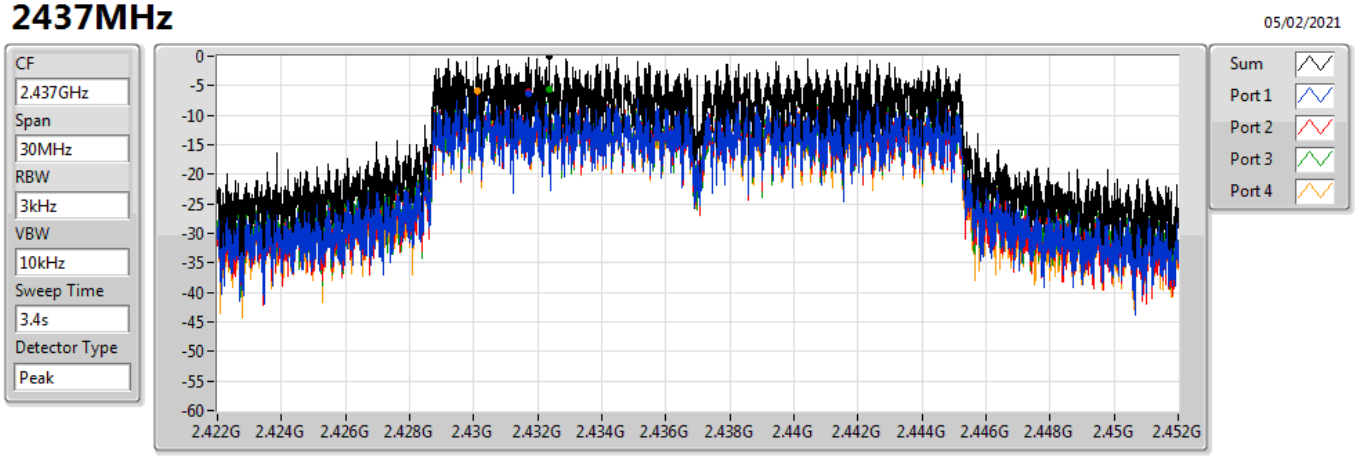
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.38	-3.38	-9.14	-8.84	-9.04	-9.99

802.11g_Nss1,(6Mbps)_4TX PSD

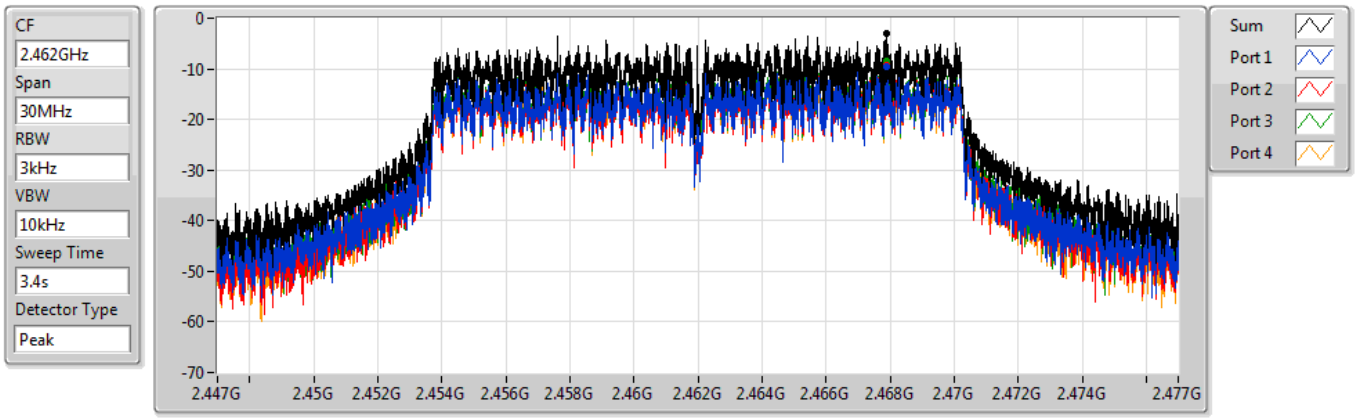
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.09	-0.09	-6.36	-6.18	-5.58	-5.75

802.11g_Nss1,(6Mbps)_4TX PSD

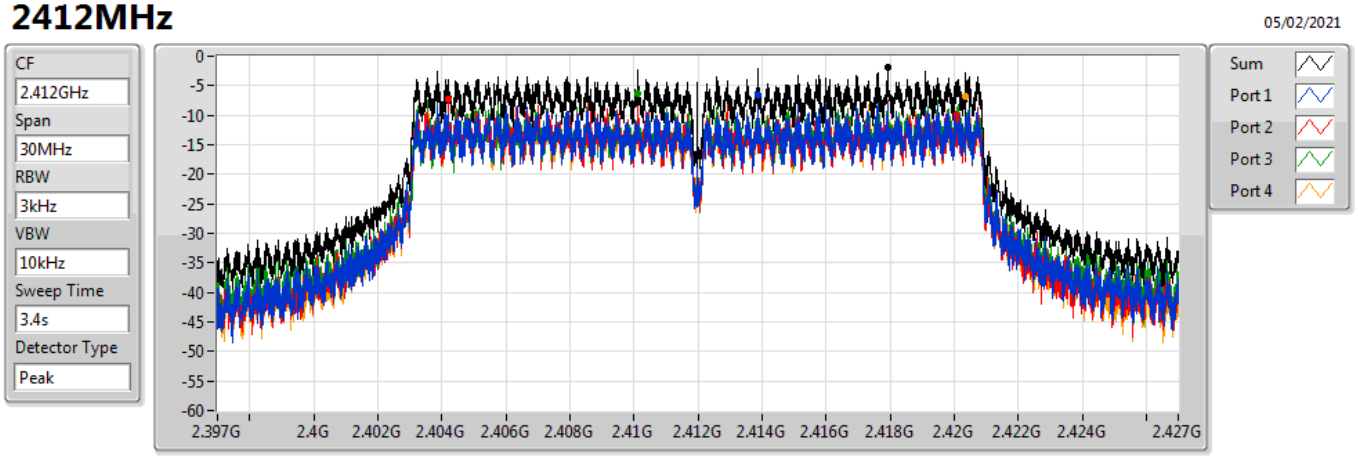
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.93	-2.93	-9.55	-9.20	-8.38	-8.75

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

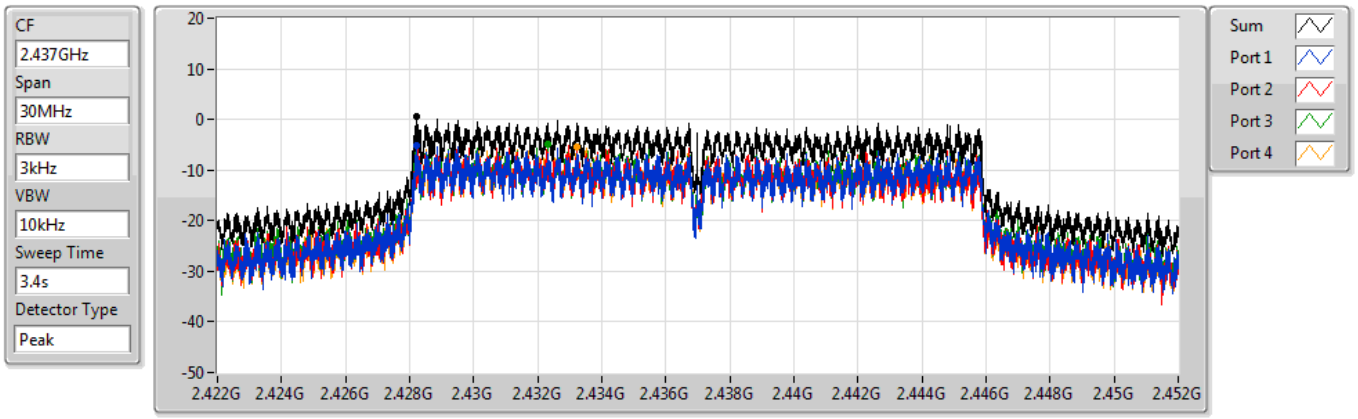
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.94	-1.94	-6.64	-7.33	-6.38	-6.84

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

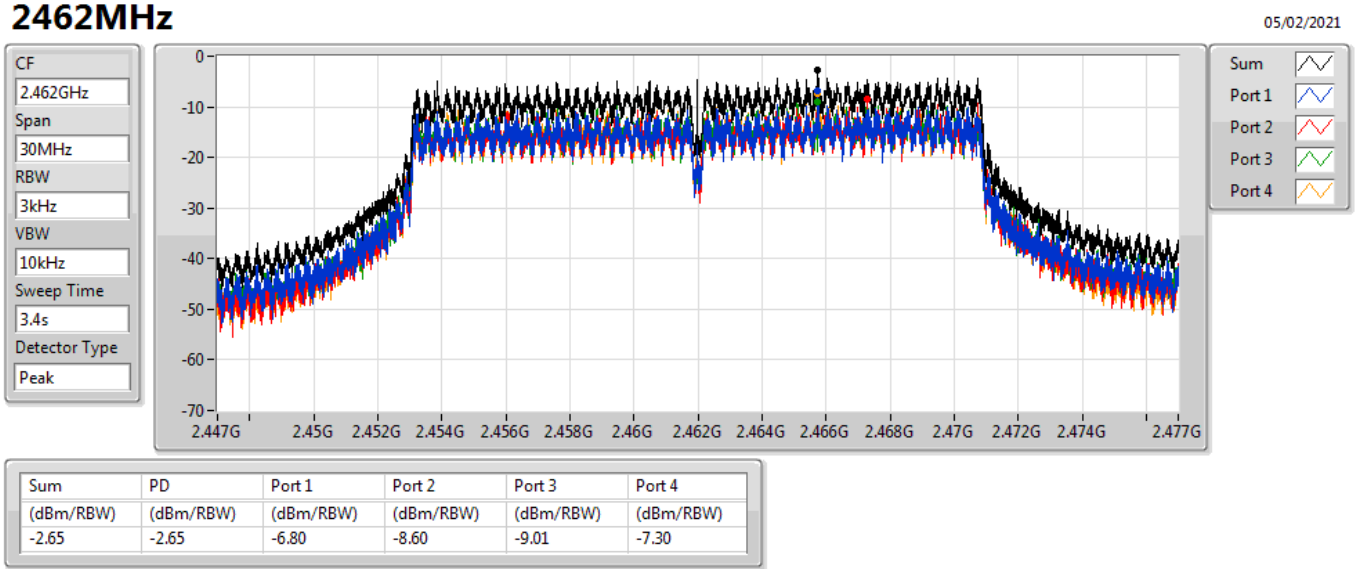
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.58	0.58	-5.06	-5.25	-4.95	-5.56

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

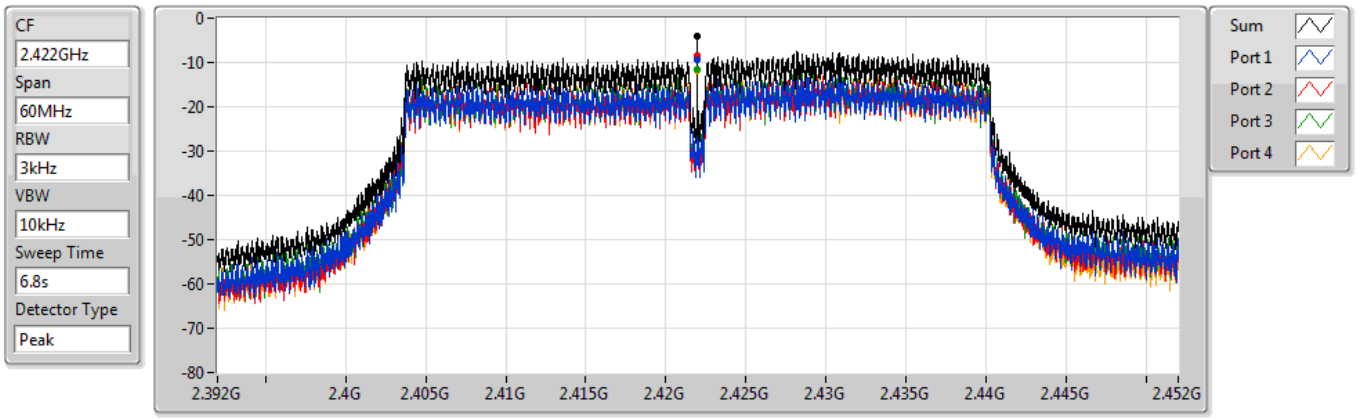
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.65	-2.65	-6.80	-8.60	-9.01	-7.30

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

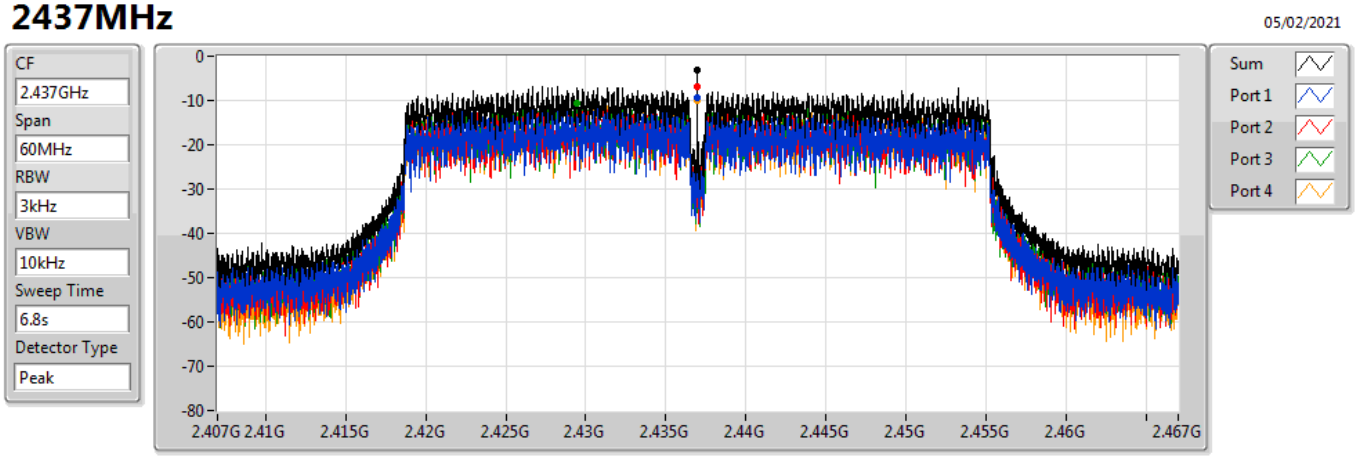
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.10	-4.10	-9.44	-8.54	-11.70	-11.72

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

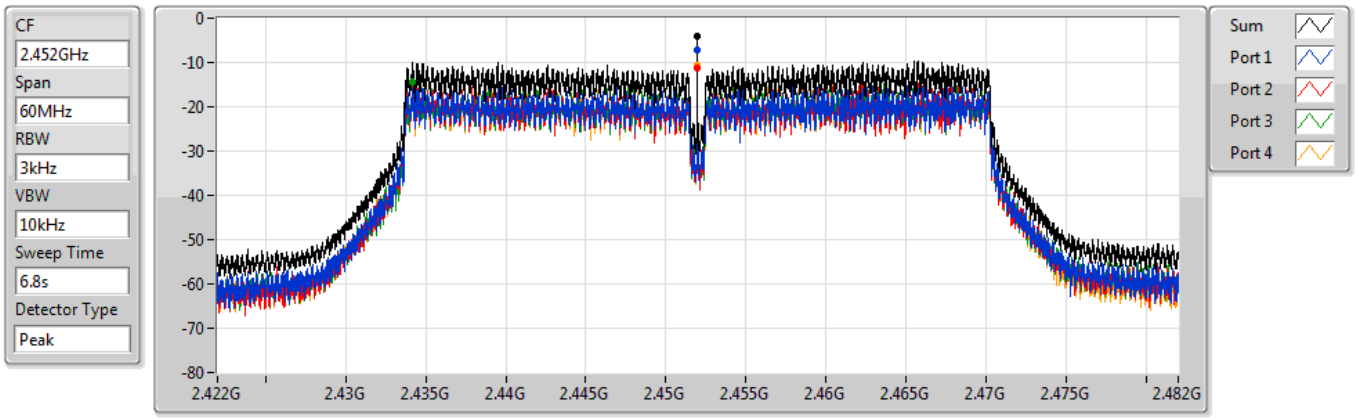
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.23	-3.23	-9.40	-6.90	-10.48	-10.07

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.18	-4.18	-7.22	-11.27	-14.36	-10.66

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	4.23
802.11g_Nss1,(6Mbps)_4TX	1.71
802.11ax HEW20_Nss1,(MCS0)_4TX	-0.62
802.11ax HEW40_Nss1,(MCS0)_4TX	-4.86

RBW = 3kHz;

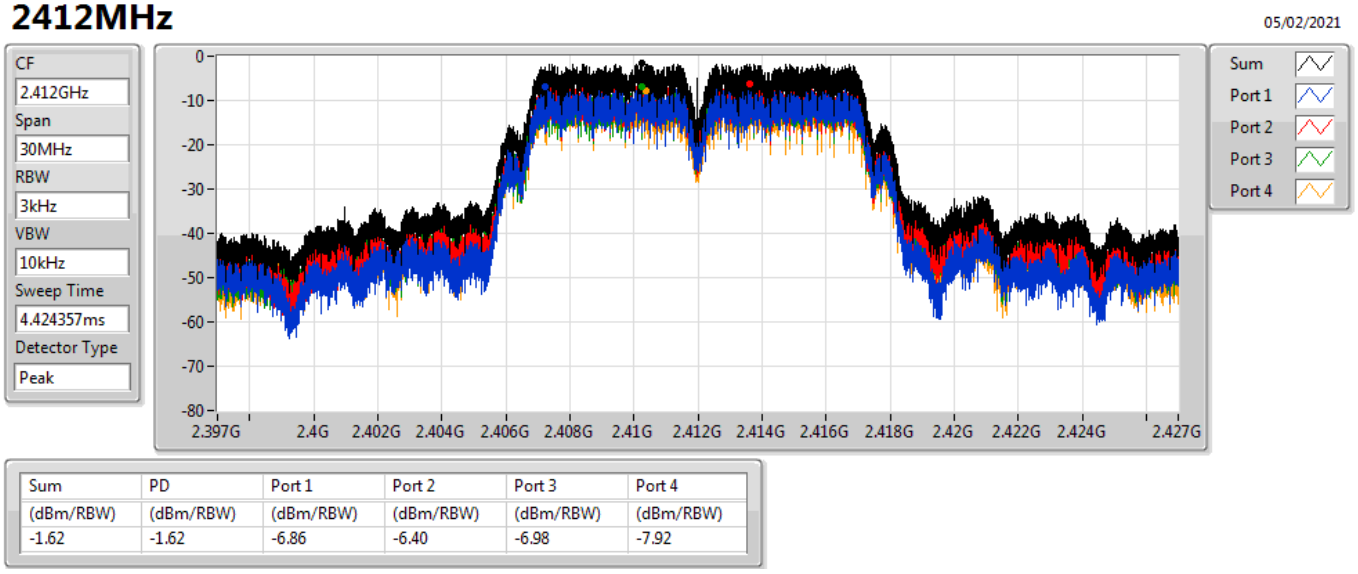
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-6.86	-6.40	-6.98	-7.92	-1.62	8.00
2437MHz	Pass	5.77	-1.17	-0.78	-1.81	-2.56	4.23	8.00
2462MHz	Pass	5.77	-8.78	-8.36	-9.59	-10.16	-3.43	8.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-8.08	-7.69	-8.53	-9.12	-2.57	8.00
2437MHz	Pass	5.77	-3.70	-3.96	-4.50	-5.21	1.71	8.00
2462MHz	Pass	5.77	-8.36	-8.42	-9.70	-10.28	-3.10	8.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-8.69	-8.07	-9.29	-10.04	-4.58	8.00
2437MHz	Pass	5.77	-4.28	-4.09	-5.75	-5.25	-0.62	8.00
2462MHz	Pass	5.77	-10.69	-10.24	-11.54	-11.57	-5.97	8.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.77	-11.54	-11.44	-11.31	-10.64	-5.88	8.00
2437MHz	Pass	5.77	-11.07	-10.59	-10.33	-9.32	-4.86	8.00
2452MHz	Pass	5.77	-12.75	-13.77	-13.93	-14.98	-7.87	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_4TX PSD

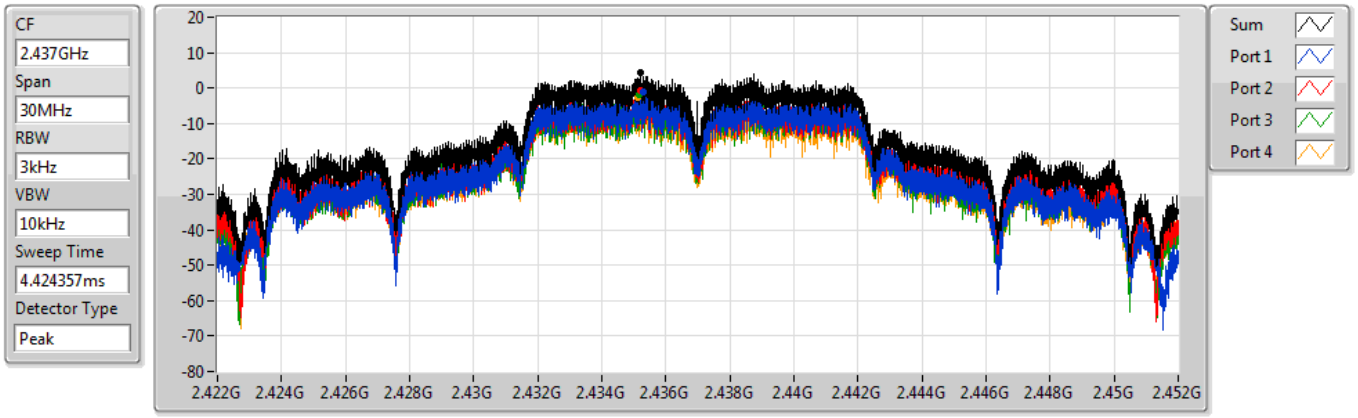
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.62	-1.62	-6.86	-6.40	-6.98	-7.92

802.11b_Nss1,(1Mbps)_4TX PSD

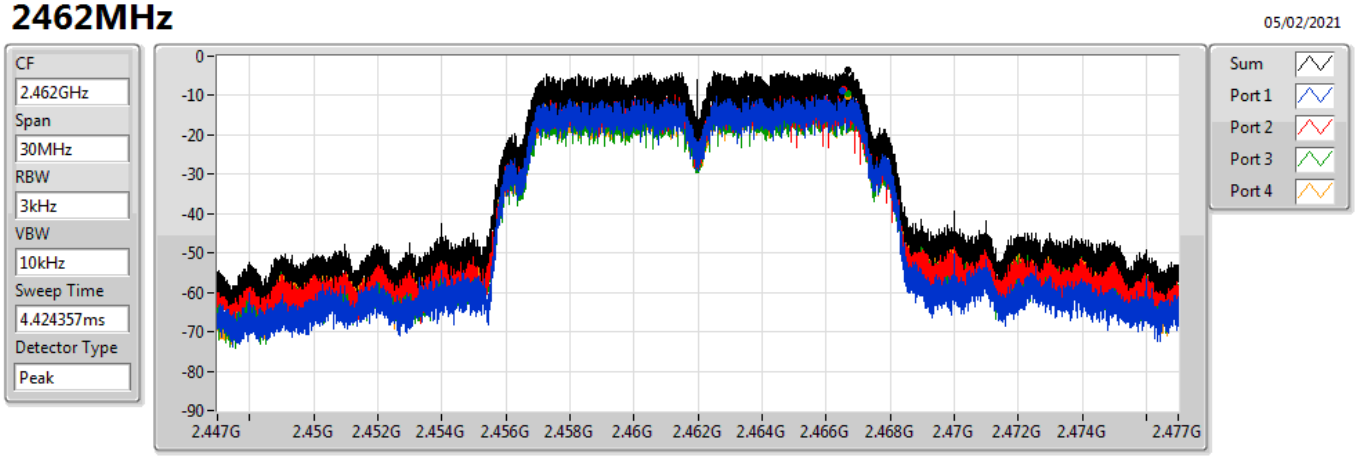
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.23	4.23	-1.17	-0.78	-1.81	-2.56

802.11b_Nss1,(1Mbps)_4TX PSD

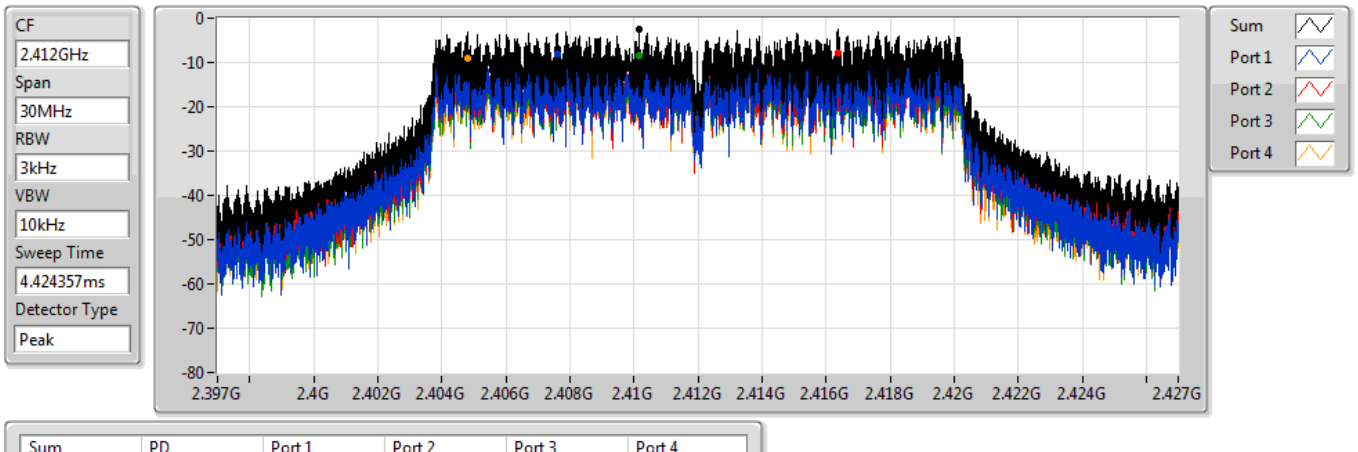
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.43	-3.43	-8.78	-8.36	-9.59	-10.16

802.11g_Nss1,(6Mbps)_4TX PSD

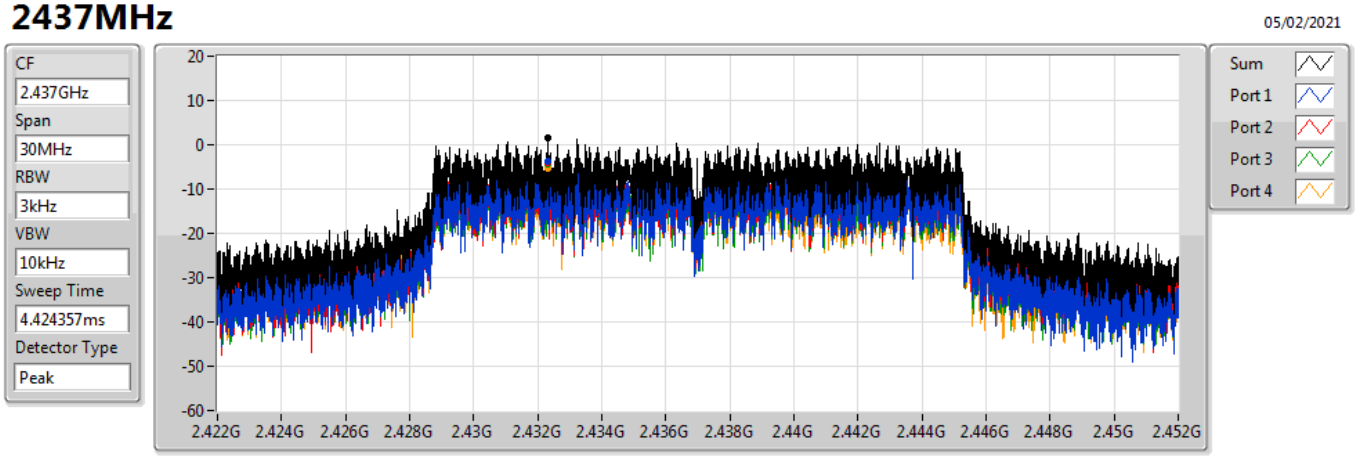
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.57	-2.57	-8.08	-7.69	-8.53	-9.12

802.11g_Nss1,(6Mbps)_4TX PSD

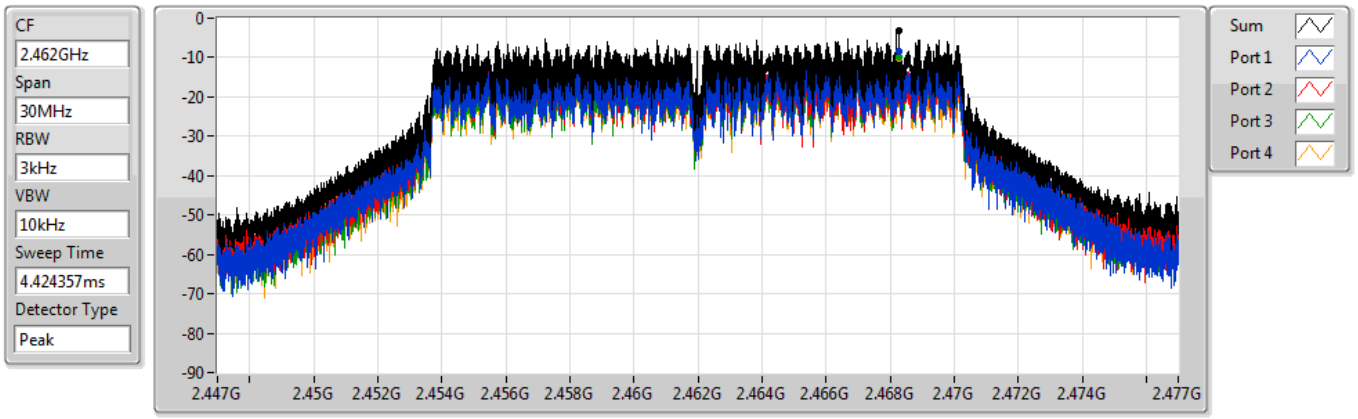
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.71	1.71	-3.70	-3.96	-4.50	-5.21

802.11g_Nss1,(6Mbps)_4TX PSD

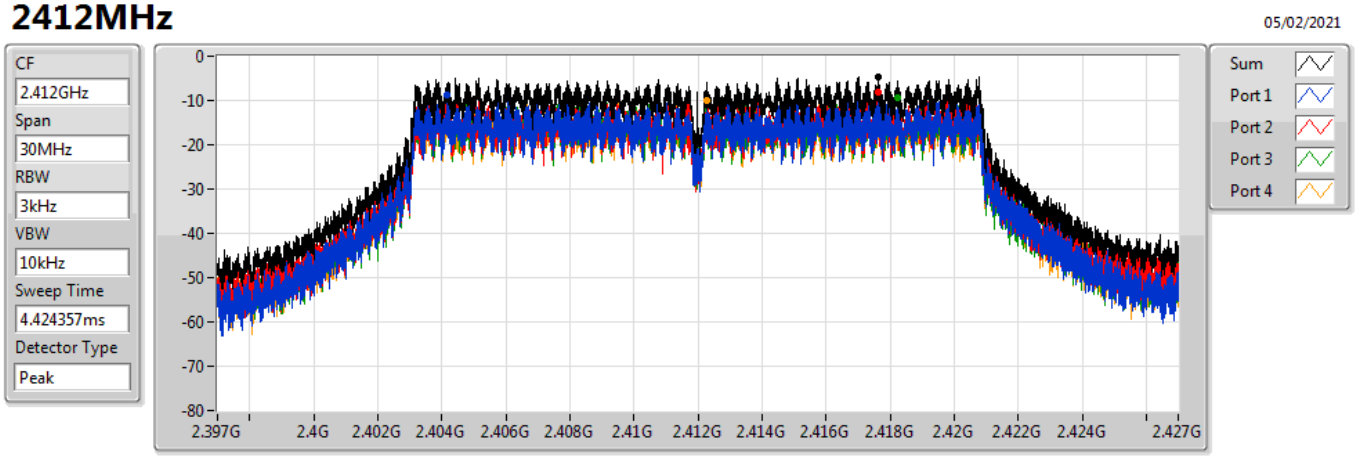
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.10	-3.10	-8.36	-8.42	-9.70	-10.28

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

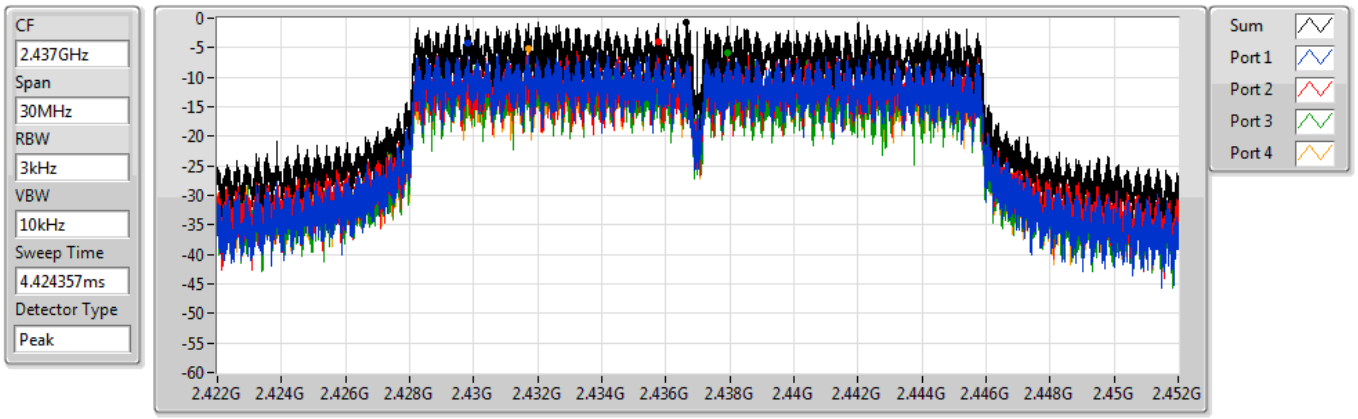
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.58	-4.58	-8.69	-8.07	-9.29	-10.04

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

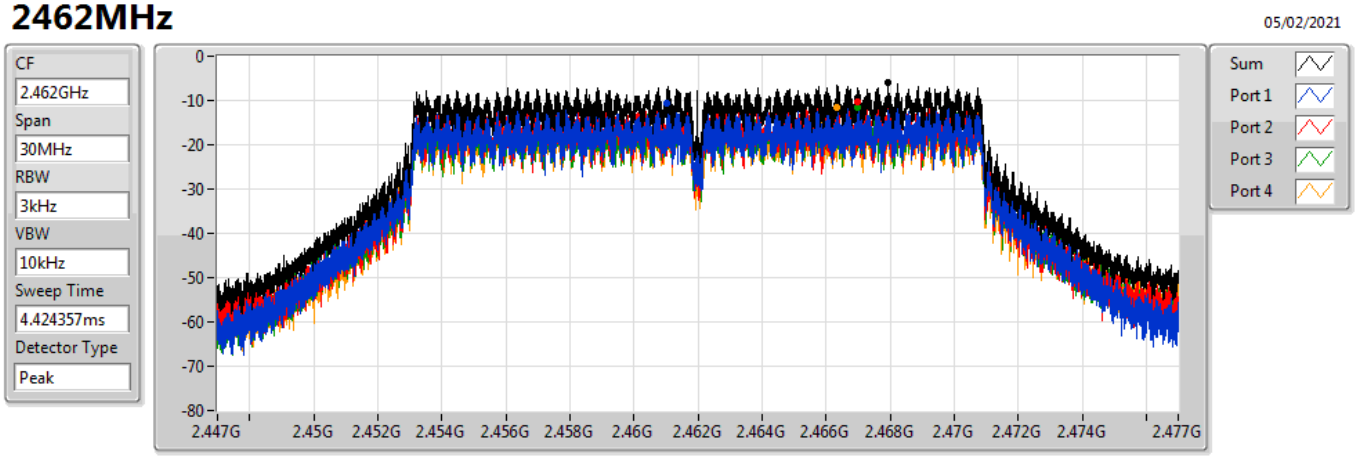
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.62	-0.62	-4.28	-4.09	-5.75	-5.25

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

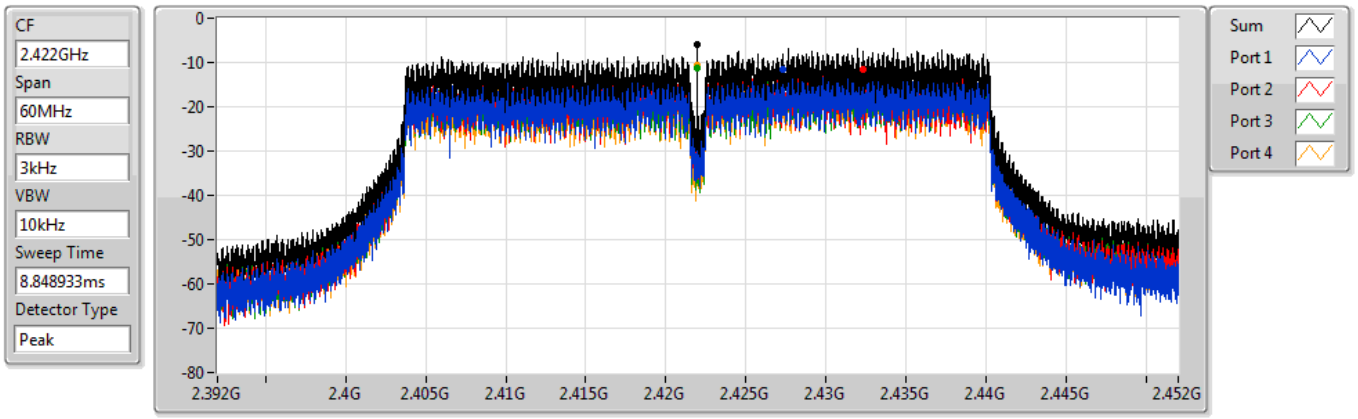
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.97	-5.97	-10.69	-10.24	-11.54	-11.57

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

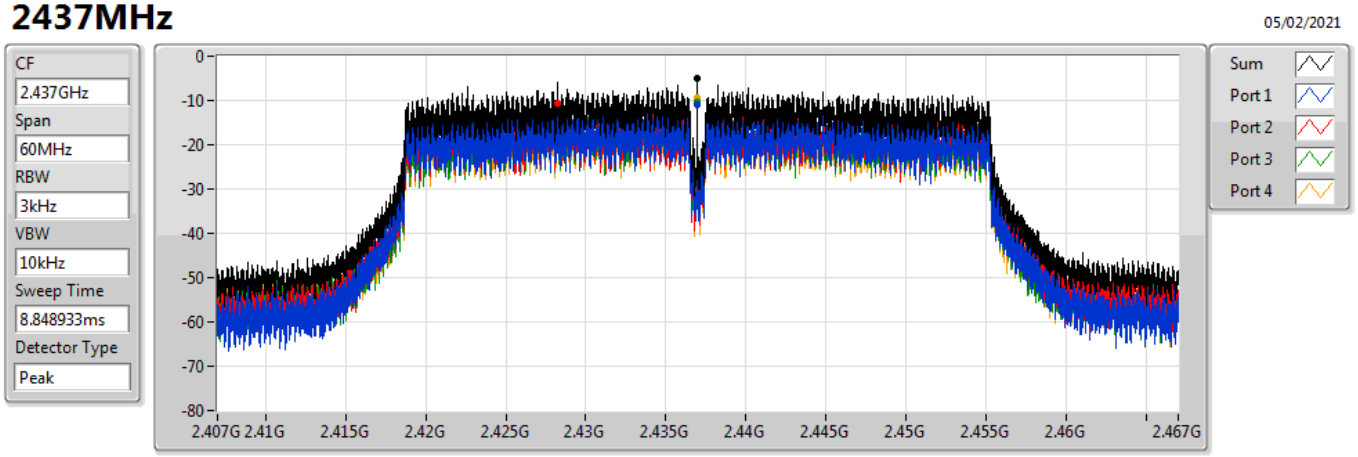
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.88	-5.88	-11.54	-11.44	-11.31	-10.64

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

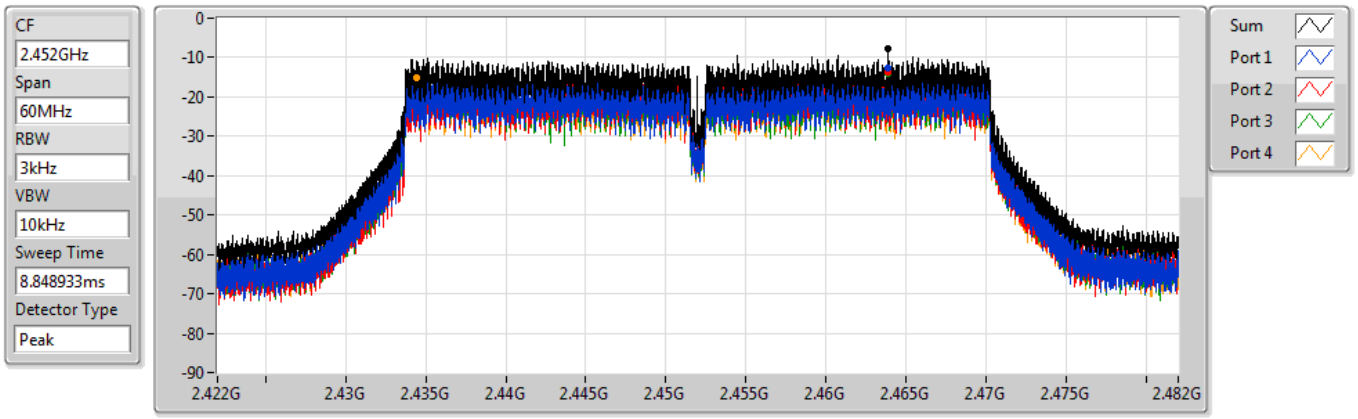
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.86	-4.86	-11.07	-10.59	-10.33	-9.32

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.87	-7.87	-12.75	-13.77	-13.93	-14.98

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	1.47
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.53

RBW = 3kHz;

Result

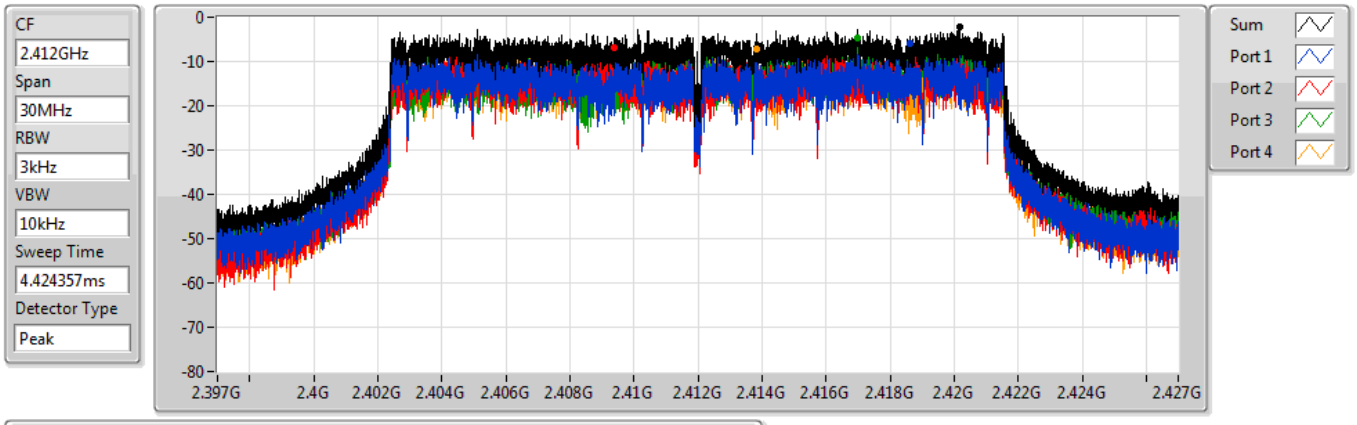
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-6.08	-6.83	-4.60	-7.19	-2.14	8.00
2437MHz	Pass	5.77	-2.92	-2.72	-2.67	-3.08	1.47	8.00
2462MHz	Pass	5.77	-7.99	-6.89	-7.05	-7.50	-3.17	8.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.77	-6.39	-2.69	-4.60	-9.86	0.53	8.00
2437MHz	Pass	5.77	-7.36	-5.77	-4.24	-7.36	-0.30	8.00
2452MHz	Pass	5.77	-14.76	-12.98	-13.27	-15.16	-8.10	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2412MHz

24/02/2021

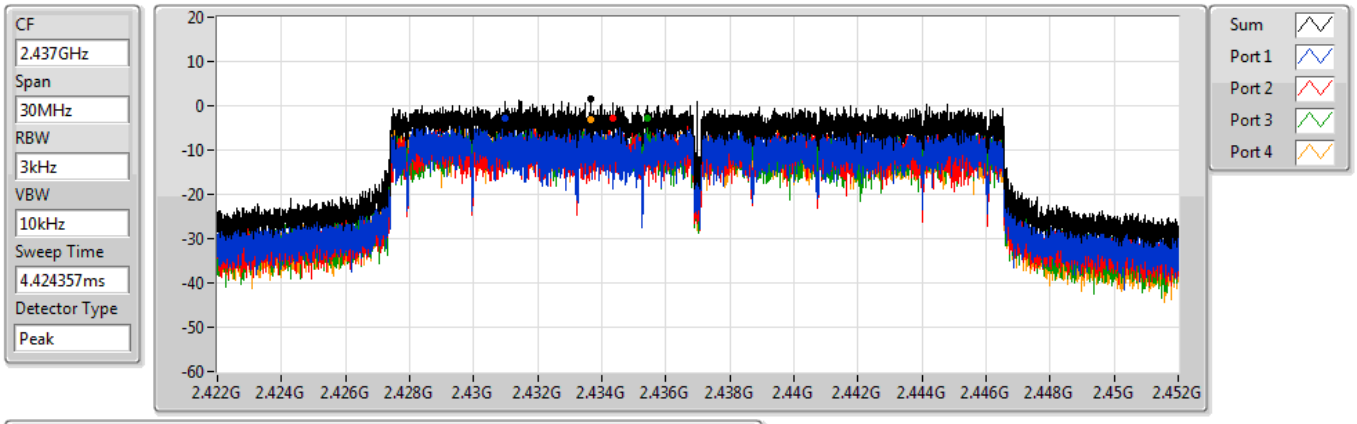


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.14	-2.14	-6.08	-6.83	-4.60	-7.19

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2437MHz

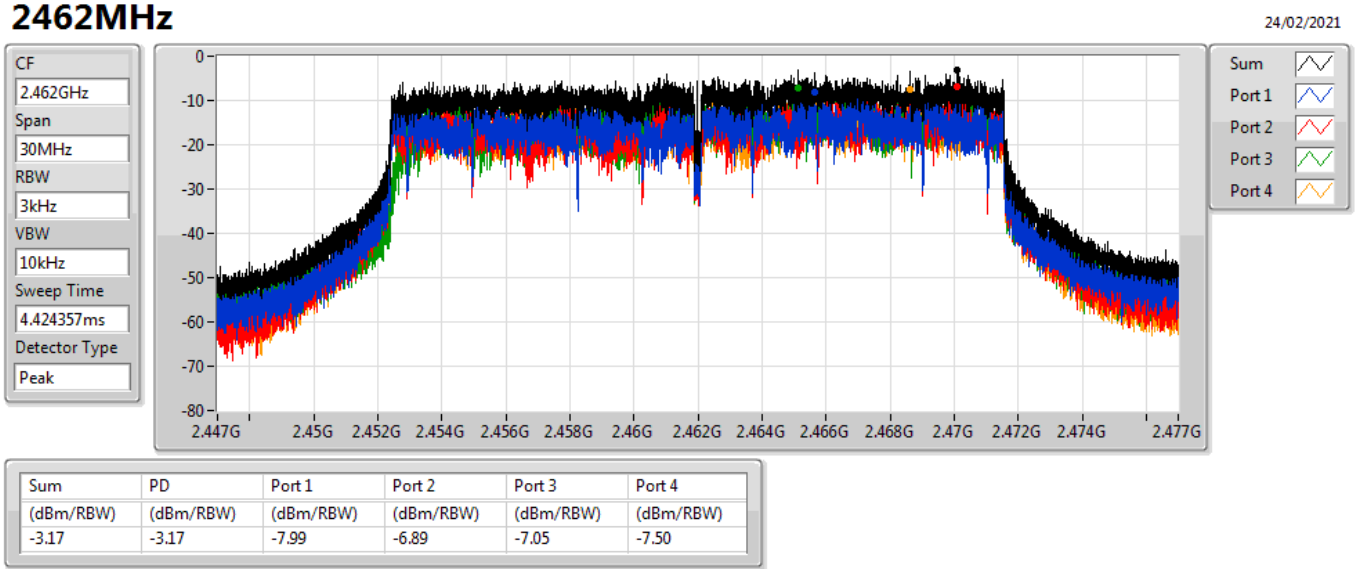
17/03/2021



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.47	1.47	-2.92	-2.72	-2.67	-3.08

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

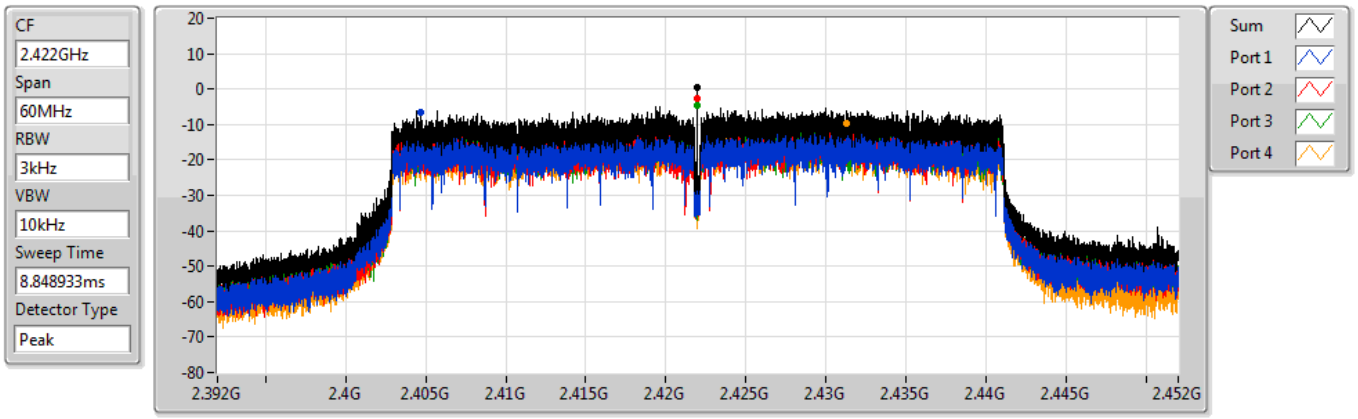
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.17	-3.17	-7.99	-6.89	-7.05	-7.50

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

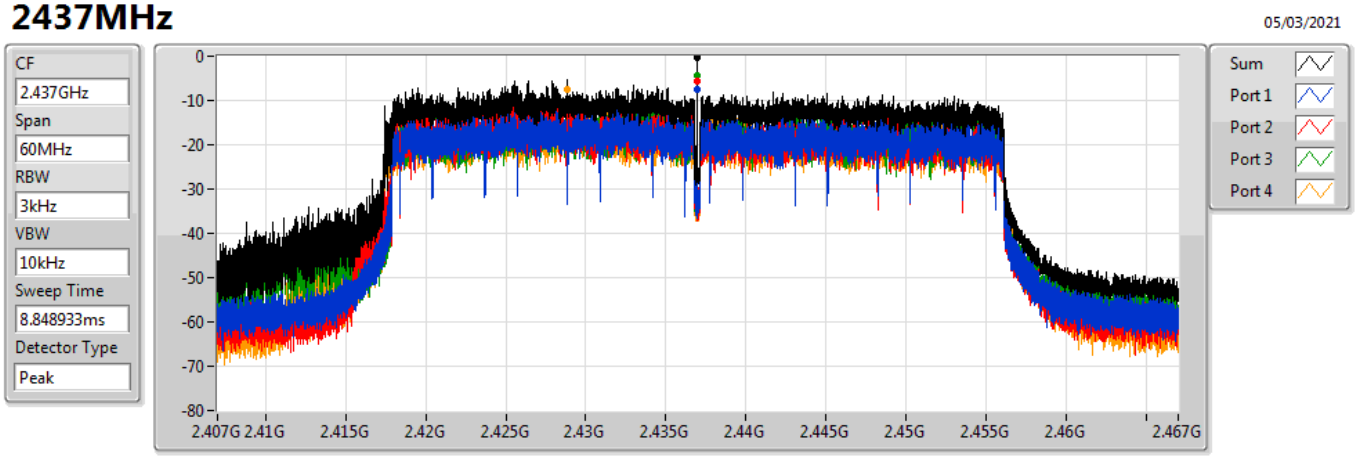
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.53	0.53	-6.39	-2.69	-4.60	-9.86

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

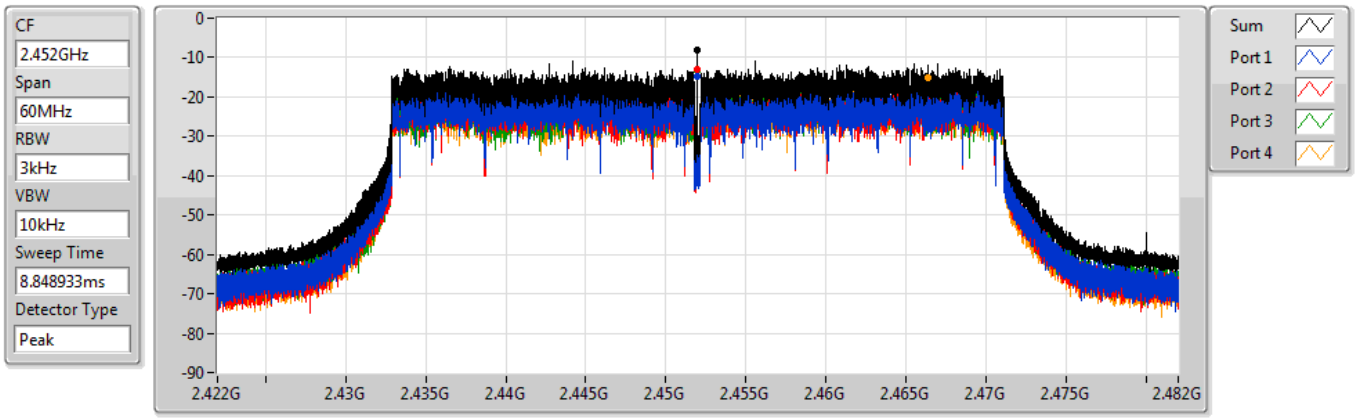
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.30	-0.30	-7.36	-5.77	-4.24	-7.36

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.10	-8.10	-14.76	-12.98	-13.27	-15.16

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	1.75
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-4.43

RBW = 3kHz;

Result

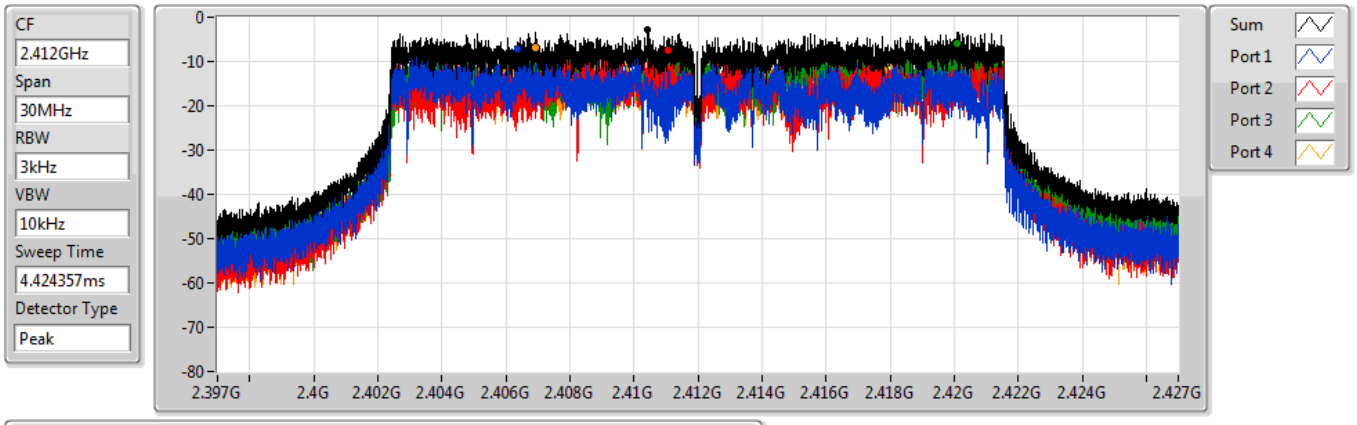
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.77	-7.14	-7.53	-5.92	-6.90	-2.72	8.00
2437MHz	Pass	5.77	-3.66	-4.19	-2.64	-2.13	1.75	8.00
2462MHz	Pass	5.77	-11.12	-10.90	-9.30	-8.50	-5.20	8.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.77	-10.69	-9.39	-6.67	-9.45	-5.37	8.00
2437MHz	Pass	5.77	-7.44	-8.03	-11.57	-11.34	-4.43	8.00
2452MHz	Pass	5.77	-15.85	-8.80	-14.56	-13.26	-8.27	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2412MHz

24/02/2021

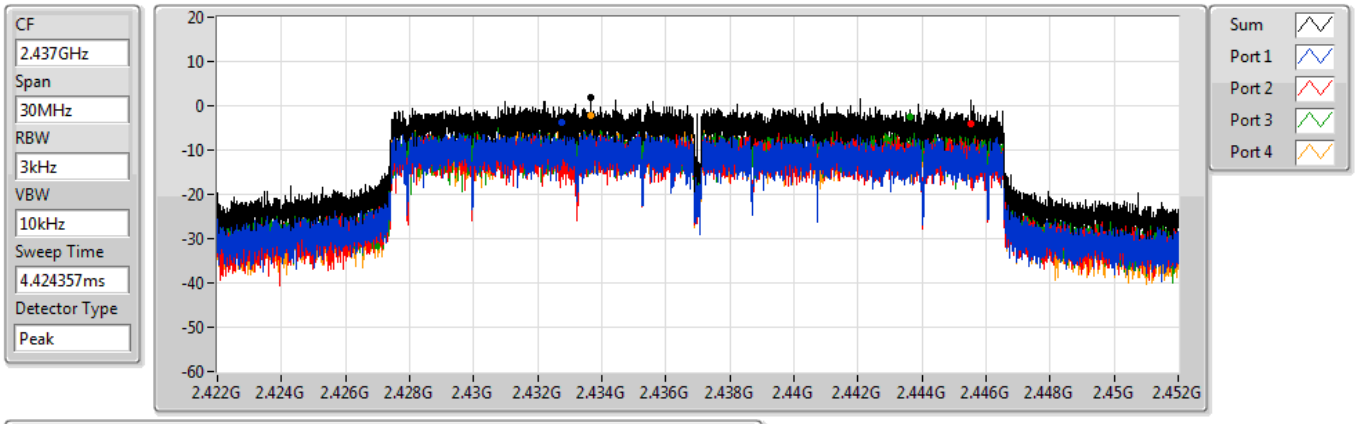


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.72	-2.72	-7.14	-7.53	-5.92	-6.90

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

2437MHz

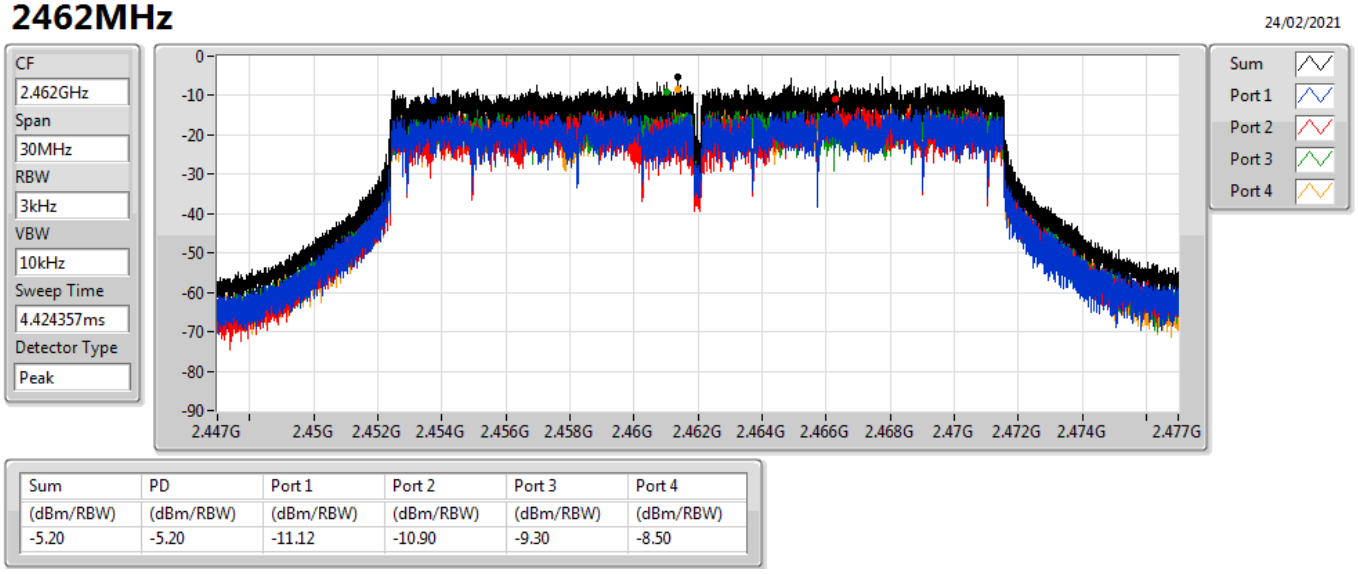
17/03/2021



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.75	1.75	-3.66	-4.19	-2.64	-2.13

802.11ax HEW20-BF_Nss1,(MCS0)_4TX PSD

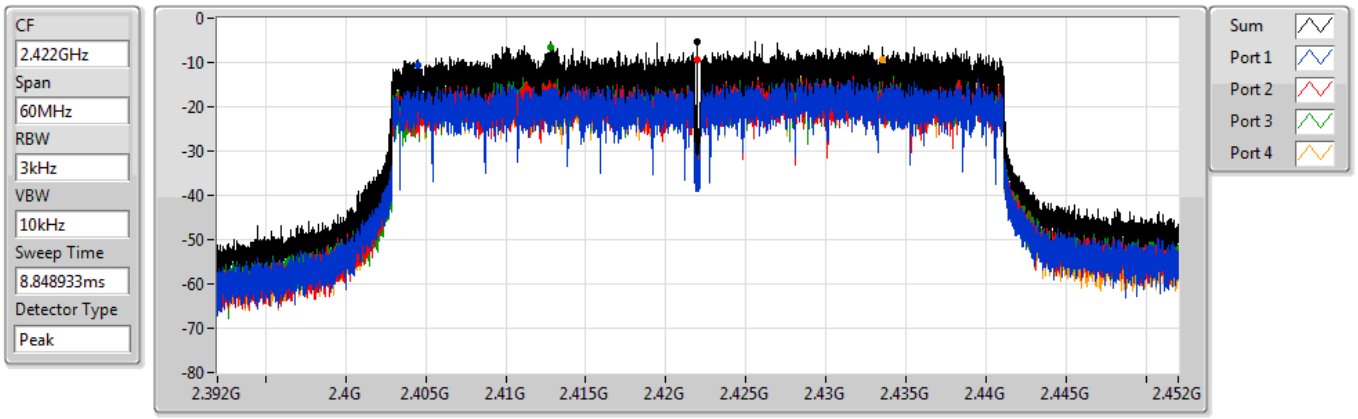
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.20	-5.20	-11.12	-10.90	-9.30	-8.50

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

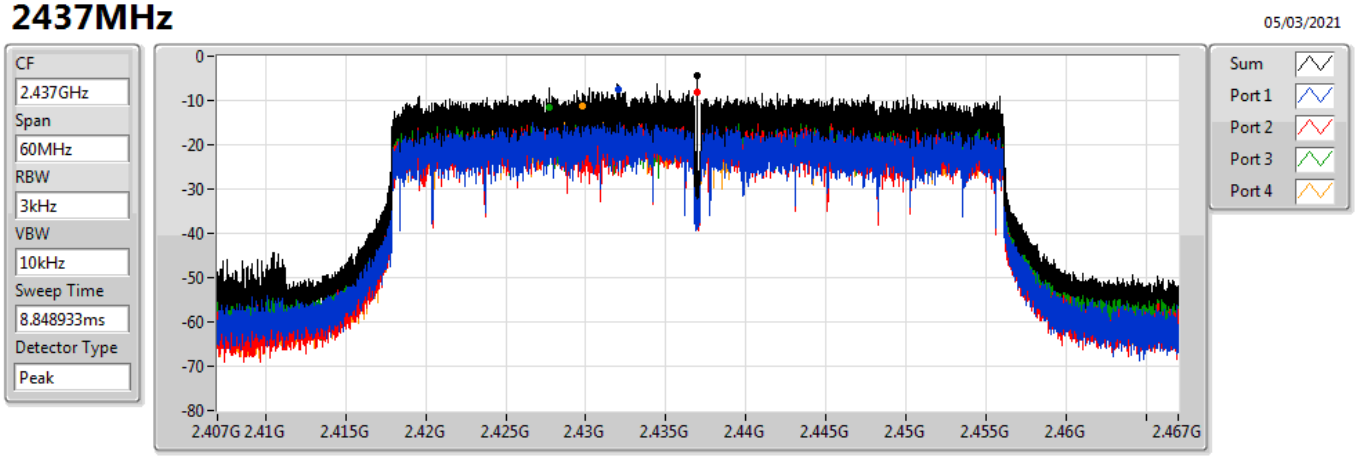
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.37	-5.37	-10.69	-9.39	-6.67	-9.45

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

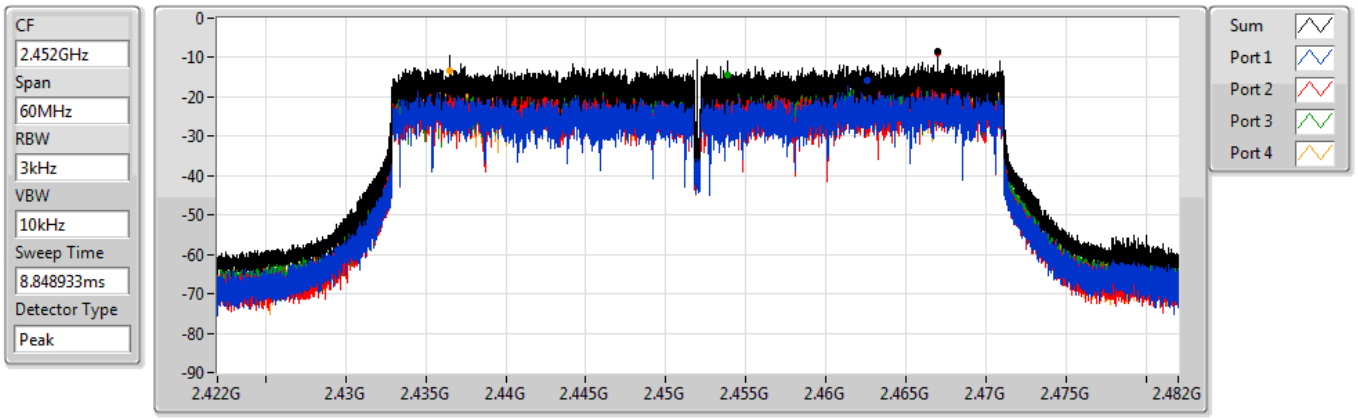
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.43	-4.43	-7.44	-8.03	-11.57	-11.34

802.11ax HEW40-BF_Nss1,(MCS0)_4TX PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.27	-8.27	-15.85	-8.80	-14.56	-13.26

Summary

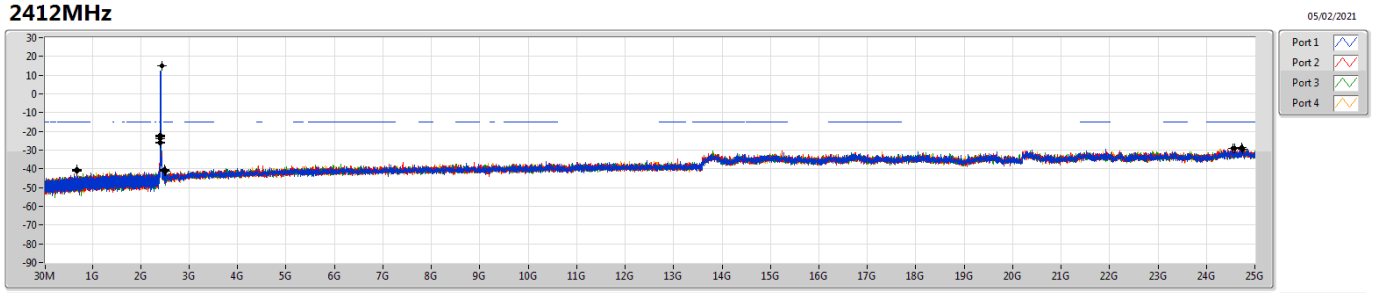
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	2.43849G	15.19	-14.81	673.66M	-40.19	2.39998G	-22.73	2.4G	-22.22	2.48868G	-41.01	24.5898G	-29.28	1
802.11g_Nss1,(6Mbps)_4TX	Pass	2.43073G	12.55	-17.45	2.01836G	-42.21	2.39978G	-26.93	2.4G	-26.48	2.4989G	-40.97	24.39594G	-28.85	1
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	2.43073G	12.60	-17.40	1.75333G	-41.97	2.39888G	-20.77	2.4G	-24.32	2.49392G	-41.03	24.72185G	-29.87	3
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	2.43198G	5.18	-24.82	1.72918G	-41.71	2.39988G	-28.00	2.4G	-30.64	2.53278G	-41.75	24.8794G	-28.93	1

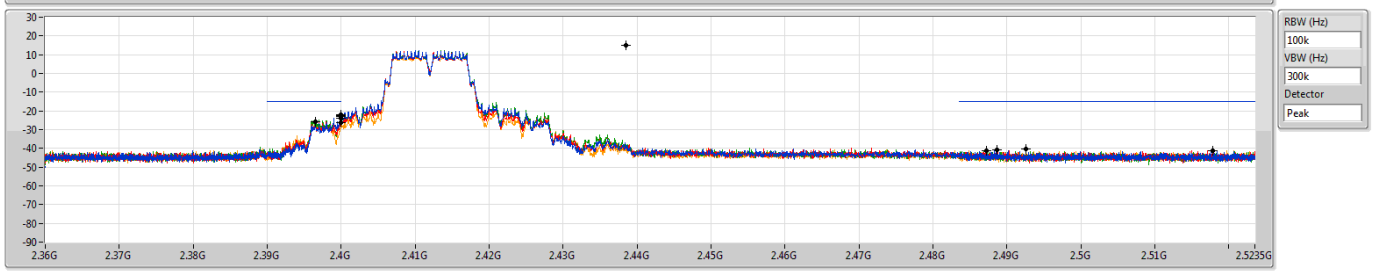
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43849G	15.19	-14.81	673.66M	-40.19	2.39998G	-22.73	2.4G	-22.22	2.48868G	-41.01	24.5898G	-29.28	1
2412MHz	Pass	2.43849G	15.19	-14.81	673.66M	-41.10	2.4G	-23.80	2.4G	-24.01	2.48718G	-41.07	24.72185G	-28.78	2
2412MHz	Pass	2.43849G	15.19	-14.81	673.66M	-40.79	2.4G	-22.76	2.4G	-22.37	2.51778G	-41.43	24.55328G	-29.05	3
2412MHz	Pass	2.43849G	15.19	-14.81	673.66M	-41.10	2.39648G	-25.70	2.4G	-26.34	2.49258G	-40.29	24.74714G	-29.31	4
2437MHz	Pass	2.43849G	15.19	-14.81	698.71M	-35.44	2.39904G	-36.95	2.4G	-37.73	2.48674G	-39.73	24.39594G	-28.84	1
2437MHz	Pass	2.43849G	15.19	-14.81	698.71M	-35.74	2.399G	-36.69	2.4G	-37.93	2.48864G	-40.25	24.56452G	-28.94	2
2437MHz	Pass	2.43849G	15.19	-14.81	698.71M	-34.72	2.39904G	-33.74	2.4G	-37.17	2.4921G	-40.41	24.91009G	-29.42	3
2437MHz	Pass	2.43849G	15.19	-14.81	698.71M	-35.12	2.39402G	-38.80	2.4G	-40.53	2.49098G	-40.92	24.84266G	-29.88	4
2462MHz	Pass	2.43849G	15.19	-14.81	1.88905G	-42.68	2.39112G	-41.52	2.4835G	-41.97	2.48364G	-40.21	24.68252G	-29.78	1
2462MHz	Pass	2.43849G	15.19	-14.81	2.14972G	-41.85	2.39612G	-40.80	2.4835G	-39.76	2.48354G	-40.83	24.71904G	-29.45	2
2462MHz	Pass	2.43849G	15.19	-14.81	723.76M	-40.99	2.39098G	-40.38	2.4835G	-40.73	2.48796G	-38.24	21.46838G	-29.51	3
2462MHz	Pass	2.43849G	15.19	-14.81	723.76M	-42.02	2.3911G	-41.72	2.4835G	-42.32	2.484G	-40.37	24.6769G	-29.60	4
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	12.55	-17.45	2.01836G	-42.21	2.39978G	-26.93	2.4G	-26.48	2.4989G	-40.97	24.39594G	-28.85	1
2412MHz	Pass	2.43073G	12.55	-17.45	2.07283G	-42.25	2.39982G	-28.06	2.4G	-30.83	2.493G	-40.87	24.89324G	-29.12	2
2412MHz	Pass	2.43073G	12.55	-17.45	2.15292G	-42.55	2.39976G	-26.89	2.4G	-29.61	2.51864G	-41.20	24.8539G	-29.70	3
2412MHz	Pass	2.43073G	12.55	-17.45	1.73265G	-41.34	2.3999G	-28.04	2.4G	-30.24	2.49674G	-41.04	24.51956G	-28.62	4
2437MHz	Pass	2.43073G	12.55	-17.45	2.18787G	-42.48	2.39888G	-36.23	2.4G	-39.33	2.48354G	-40.29	24.42123G	-29.22	1
2437MHz	Pass	2.43073G	12.55	-17.45	1.77022G	-42.09	2.39946G	-36.80	2.4G	-38.93	2.48382G	-39.47	24.41842G	-29.52	2
2437MHz	Pass	2.43073G	12.55	-17.45	694.05M	-42.28	2.39884G	-35.28	2.4G	-37.59	2.4839G	-38.42	24.60104G	-28.93	3
2437MHz	Pass	2.43073G	12.55	-17.45	2.05914G	-42.05	2.39736G	-36.67	2.4G	-38.09	2.48502G	-39.84	24.77524G	-28.24	4
2462MHz	Pass	2.43073G	12.55	-17.45	1.85556G	-41.67	2.39184G	-41.57	2.4835G	-39.10	2.48384G	-36.61	24.73028G	-29.88	1
2462MHz	Pass	2.43073G	12.55	-17.45	2.02186G	-41.53	2.39902G	-40.81	2.4835G	-39.03	2.48384G	-36.88	24.78085G	-30.21	2
2462MHz	Pass	2.43073G	12.55	-17.45	1.63916G	-41.90	2.3969G	-41.15	2.4835G	-37.72	2.48384G	-37.18	24.7949G	-29.31	3
2462MHz	Pass	2.43073G	12.55	-17.45	2.13865G	-42.25	2.39512G	-41.66	2.4835G	-40.96	2.48444G	-39.29	24.47742G	-29.65	4
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	12.60	-17.40	1.90186G	-42.15	2.39948G	-22.07	2.4G	-24.10	2.48416G	-40.82	24.82581G	-29.71	1
2412MHz	Pass	2.43073G	12.60	-17.40	925.89M	-41.93	2.3997G	-24.47	2.4G	-25.76	2.51562G	-41.21	24.80614G	-29.85	2
2412MHz	Pass	2.43073G	12.60	-17.40	1.75333G	-41.97	2.39888G	-20.77	2.4G	-24.32	2.49392G	-41.03	24.72185G	-29.87	3
2412MHz	Pass	2.43073G	12.60	-17.40	2.13952G	-42.19	2.39998G	-24.04	2.4G	-26.77	2.4932G	-41.32	24.71342G	-29.72	4
2437MHz	Pass	2.43073G	12.60	-17.40	1.84187G	-42.17	2.39894G	-35.04	2.4G	-37.66	2.48528G	-38.33	24.75276G	-29.10	1
2437MHz	Pass	2.43073G	12.60	-17.40	810.55M	-42.28	2.39764G	-34.64	2.4G	-36.46	2.48448G	-36.11	24.6179G	-29.56	2
2437MHz	Pass	2.43073G	12.60	-17.40	2.1305G	-42.91	2.39982G	-32.71	2.4G	-34.68	2.4845G	-37.16	24.44652G	-29.57	3
2437MHz	Pass	2.43073G	12.60	-17.40	1.76935G	-42.08	2.39954G	-34.65	2.4G	-37.37	2.48478G	-38.85	24.823G	-29.27	4
2462MHz	Pass	2.43073G	12.60	-17.40	1.63391G	-41.21	2.39562G	-41.05	2.4835G	-38.32	2.48384G	-34.52	24.80333G	-28.92	1
2462MHz	Pass	2.43073G	12.60	-17.40	789.29M	-40.61	2.39696G	-40.88	2.4835G	-38.74	2.48356G	-35.35	24.62914G	-29.71	2
2462MHz	Pass	2.43073G	12.60	-17.40	2.04458G	-41.86	2.39954G	-41.69	2.4835G	-36.80	2.48352G	-35.21	24.77804G	-29.71	3
2462MHz	Pass	2.43073G	12.60	-17.40	1.79527G	-41.73	2.39242G	-41.32	2.4835G	-40.45	2.486G	-37.83	24.59542G	-29.60	4
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43198G	5.18	-24.82	1.72918G	-41.71	2.39988G	-28.00	2.4G	-30.64	2.53278G	-41.75	24.8794G	-28.93	1
2422MHz	Pass	2.43198G	5.18	-24.82	2.15741G	-42.06	2.39568G	-30.40	2.4G	-33.04	2.48754G	-39.76	24.68028G	-29.39	2
2422MHz	Pass	2.43198G	5.18	-24.82	1.71773G	-41.96	2.39572G	-28.53	2.4G	-30.63	2.48446G	-40.61	24.61297G	-29.40	3
2422MHz	Pass	2.43198G	5.18	-24.82	2.06696G	-42.51	2.39896G	-30.76	2.4G	-33.85	2.51814G	-41.27	24.87099G	-29.01	4
2437MHz	Pass	2.43198G	5.18	-24.82	2.18203G	-42.08	2.39948G	-29.21	2.4G	-36.75	2.48538G	-37.27	24.78405G	-29.66	1
2437MHz	Pass	2.43198G	5.18	-24.82	1.94616G	-42.33	2.39868G	-32.87	2.4G	-36.52	2.48418G	-38.52	24.92708G	-29.28	2
2437MHz	Pass	2.43198G	5.18	-24.82	2.19978G	-42.26	2.3994G	-31.15	2.4G	-37.46	2.48546G	-38.38	24.61297G	-29.34	3
2437MHz	Pass	2.43198G	5.18	-24.82	2.0389G	-41.92	2.39944G	-31.36	2.4G	-38.16	2.48538G	-38.94	24.84014G	-29.73	4
2452MHz	Pass	2.43198G	5.18	-24.82	1.75637G	-40.99	2.39628G	-41.59	2.4835G	-37.67	2.48446G	-33.32	24.34093G	-29.85	1
2452MHz	Pass	2.43198G	5.18	-24.82	1.92927G	-42.38	2.39612G	-41.54	2.4835G	-31.41	2.48566G	-30.67	23.35372G	-29.72	2
2452MHz	Pass	2.43198G	5.18	-24.82	2.05894G	-41.32	2.39736G	-41.85	2.4835G	-37.94	2.48562G	-31.45	24.70272G	-29.34	3
2452MHz	Pass	2.43198G	5.18	-24.82	1.8142G	-41.99	2.39948G	-41.41	2.4835G	-39.92	2.4857G	-33.69	24.59053G	-29.66	4

802.11b_Nss1,(1Mbps)_4TX **CSENdB**

2412MHz

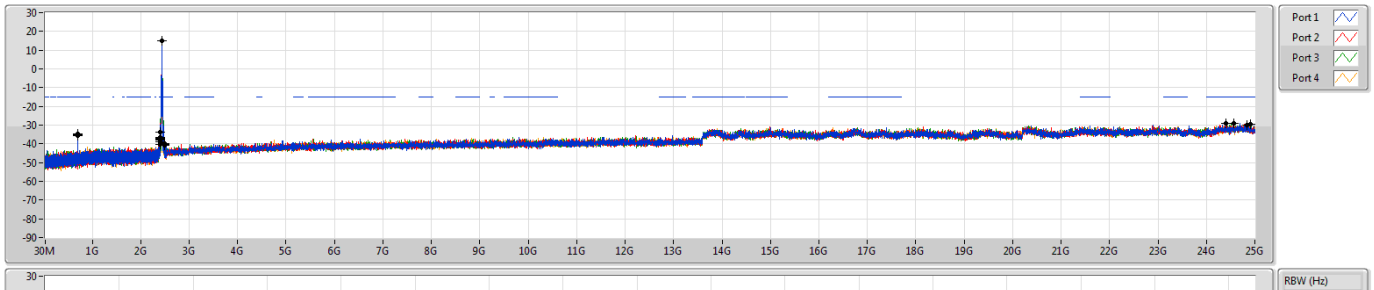


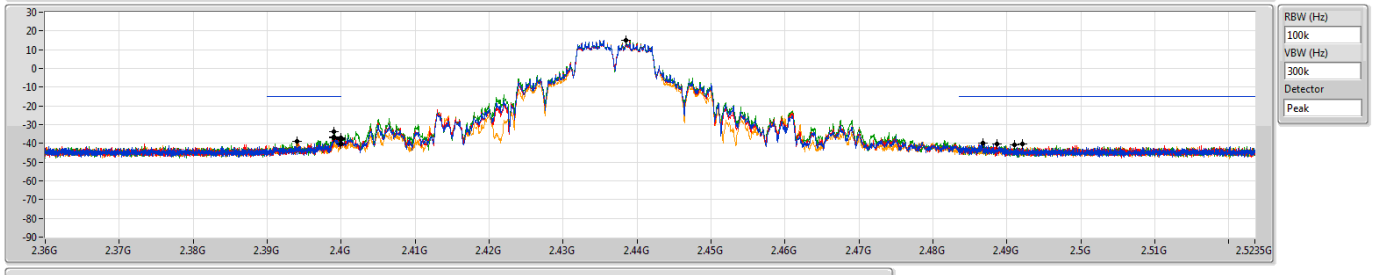


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43849G	15.19	-14.81	673.66M	-40.19	2.39998G	-22.73	2.4G	-22.22	2.48868G	-41.01	24.5898G	-29.28	1
2.43849G	15.19	-14.81	673.66M	-41.10	2.4G	-23.80	2.4G	-24.01	2.48718G	-41.07	24.72185G	-28.78	2
2.43849G	15.19	-14.81	673.66M	-40.79	2.4G	-22.76	2.4G	-22.37	2.51778G	-41.43	24.55328G	-29.05	3
2.43849G	15.19	-14.81	673.66M	-41.10	2.39648G	-25.70	2.4G	-26.34	2.49258G	-40.29	24.74714G	-29.31	4

802.11b_Nss1,(1Mbps)_4TX **CSENdB**

2437MHz





Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43849G	15.19	-14.81	698.71M	-35.44	2.39904G	-36.95	2.4G	-37.73	2.48674G	-39.73	24.39594G	-28.84	1
2.43849G	15.19	-14.81	698.71M	-35.74	2.399G	-36.69	2.4G	-37.93	2.48864G	-40.25	24.56452G	-28.94	2
2.43849G	15.19	-14.81	698.71M	-34.72	2.39904G	-33.74	2.4G	-37.17	2.4921G	-40.41	24.91009G	-29.42	3
2.43849G	15.19	-14.81	698.71M	-35.12	2.39402G	-38.80	2.4G	-40.53	2.49098G	-40.92	24.84266G	-29.88	4